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An Investigation Of Wholesale Buyer Reaction  
To Manufacturer Customer Service Failures  
In The Grocery Channel

presented by

Marcus Lyndsay Bennion Jr.

has been accepted towards fulfillment  
of the requirements for

Ph.D. degree in Marketing

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AN INVESTIGATION OF WHOLESALE BUYER REACTION  
TO MANUFACTURER CUSTOMER SERVICE FAILURES  
IN THE GROCERY CHANNEL

By

Marcus Lyndsay Bennion Jr.

A DISSERTATION

Submitted to  
Michigan State University  
in partial fulfillment of the requirements  
for the degree of

DOCTOR OF PHILOSOPHY

Department of Marketing and Transportation  
Administration

1980



## ABSTRACT

### AN INVESTIGATION OF WHOLESALE BUYER REACTION TO MANUFACTURER CUSTOMER SERVICE FAILURES IN THE GROCERY CHANNEL

By

Marcus Lyndsay Bennion Jr.

The term Business Logistics denotes a total approach to the management of the distribution process. The total management concept is gaining wide acceptance as a means of improving service and reducing costs. A central component of the Business Logistics concept is "Total Costs." The total cost concept is the recognition that the logistics system should be broadly enough defined so that all the relevant costs to a decision problem are considered and balanced to yield a lowest total cost.

Current Business Logistics is a field in which the total cost approach yields only suboptimal cost solutions. As yet, the costs of customer service failures remain undefined. The concept of Business Logistics implies that customer service levels (which dictate the number of customer service failures) impact on all the other elements of the logistics system. As a part of the "4 P's" of marketing, customer service has an affect upon all the elements of the marketing mix. The consequences of

inadequate levels of customer service may not be limited to the cost of a lost sale, as is currently assumed. The costs may extend so far as to jeopardize the success of the remainder of the marketing mix.

The research has been designed to explore the set of reactions of buyers within the grocery channel to manufacturer customer service failures. The research is seen as a first step in the process of understanding buyer reactions and their costs. The research was designed to yield the set of reactions the buyers perceived as open to them. In addition to the reactions, some of the situational factors which help determine the specific reactions to a service failure were examined. The investigation of the situational factors included an examination of the role of the channel variables (such as role, power, conflict, and communication) in the decision process that led to the choice of a reaction.

The first goal of the research was to determine the long-run and short-run set of alternatives open to a buyer when a customer service failure was encountered. The second goal of the research was the investigation of the decision process that led to the selection of a reaction to a service failure. The investigation of the decision process involved the exploration of the variables which were considered during the decision process.

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To investigate the reactions to service failures and the variables which affect the choice of reactions, six case studies were conducted with firms in the grocery wholesaling or retailing industry in the upper-midwest. The conduct of the case studies was guided by six research questions. These research questions led to the preparation of an interview guide which was used in the 45 interviews conducted in preparation of the case studies.

The results of the case studies indicated that the reactions to service failures could be broken down into two groups. The first group consisted of the short-run reactions. These reactions are those actions taken in direct response to an individual customer service failure. These reactions were to backorder or substitute.

The second group of reactions consisted of long-run reactions. These long-run reactions were those actions taken in response to the overall level of customer service offered by a manufacturer. These reactions could be subdivided further into three groups, direct reactions, indirect reactions, and internal adjustments.

The decision as to whether or not a firm would exhibit some form of long-run reaction was a function of the past service history of the firm. The decision as to which type of long-run reaction would be exhibited and then the specific reaction was a function of the relative power in the channel. The power relationships were a function of

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the situational variables such as: product volume, product gross margin, product inventory turnover, product uniqueness, and the strength of the remainder of the manufacturer's product line. These factors were then related to one another and the reactions in a generalized model of buyer reactions to customer service failures.



*DEDICATION*

*To my wife*

*Bonnie*

## ACKNOWLEDGMENTS

With the help of a great many people this research has finally come to fruition. To all of these people, I give my undying thanks.

My committee, Dr. George D. Wagenheim, Dr. M. Bixby Cooper, and Dr. Douglas M. Lambert were of inestimable help. My committee was a source not only of guidance, but also encouragement through the long process from proposal to final draft. I especially thank my committee for their consideration during the many meetings and consultations. They were a pleasant group with which to work.

I would like to thank Dr. George Wagenheim, my chairman, for his help and guidance through the year and a half that this project lasted. Dr. Wagenheim gave me guidance not only as a Marketing and Logistics scholar but as a person and eventually as a friend.

Dr. Cooper, I would like to thank for his patience, enduring my endless questions and annoying visits in his office. Throughout the duration Dr. Cooper was ever available and ready to discuss the research.

I would like to thank Dr. Lambert for his many contributions to help the dissertation take on its final

form. Dr. Lambert's contributions as a Logistics scholar were invaluable.

I would also like to acknowledge Dr. Bernard La Londe, John Gardner, and Robert House of Ohio State University. The original inspiration for this research occurred while I was a graduate student under these men at Ohio State.

I would also like to acknowledge Mrs. Grace Rutherford, whose professionalism in preparing the final draft of this research contributed greatly to the quality of this research.

Lastly, I would like to thank my wife Bonnie, my mother and father, along with my mother-in-law and father-in-law. The support and encouragement of both my families was a never-ending help. These people never realized how much help their encouragement and support was. To Bonnie, I would like to say that her patience, love, and encouragement are no small part of this research. Without her help this research would never have been undertaken.

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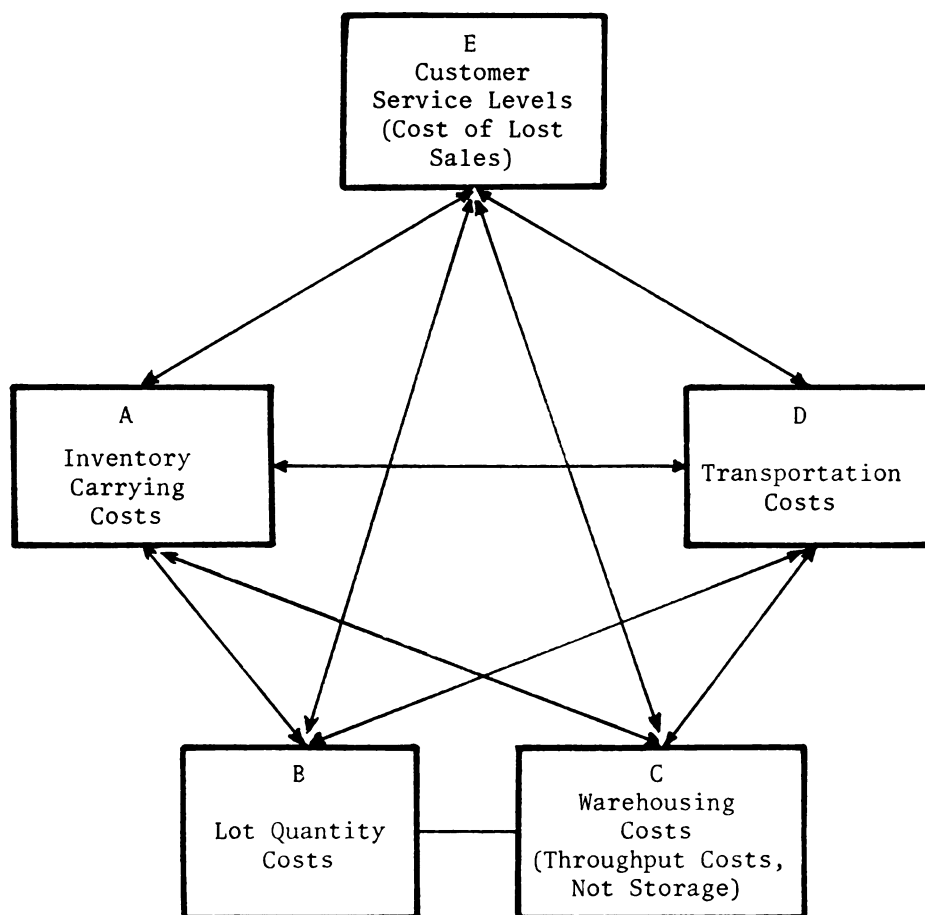
## CHAPTER I

### INTRODUCTION

#### Purpose of the Study

Business Logistics is "a term which denotes a total approach to the management of the distribution process, including all of those activities involved in physically moving raw materials, in-process inventory, and finished goods inventory from point of origin to point of use or consumption" (53:134). The Business Logistics concept is gaining wide acceptance as a means of improving service and reducing costs (15:157). A central component of the Business Logistics concept is "Total Cost Analysis" (7:22). The total cost concept is the recognition that the logistics system should be defined broadly enough so that all the relevant costs to a decision problem are considered and balanced to yield the lowest total cost (7:22).

Business Logistics is a study of trade-offs. The trade-offs made within a logistics system are illustrated in Figure 1-1. The elements are: customer service levels (the cost of lost sales); transportation costs; warehousing costs; lot quantity costs; and inventory carrying costs (54:6). Due to the difficulties of measuring the cost of



Objective: Minimize Total Cost  
 Total Costs = A + B + C + D + E

Figure 1-1. Cost Tradeoffs Required in the Logistics System.

(Source: Douglas M. Lambert, "The Development of an Inventory Costing Methodology: A Study of the Costs Associated With Holding Inventory" (Ph.D. dissertation, Ohio State University, 1975), p. 8.

a stockout, any logistical system must assume a given level of customer service (54:8). The level of customer service chosen by a company may not, and in many cases probably is not, the level of service which would maximize the profits of the organization. Often, the level of customer service chosen by a company is the result of industry norms, organizational habits, undue optimism, or worst, whim (74:68).

As research has shown, buyers at both the retail and wholesale levels are highly sensitive to even small changes in product availability or order cycle time (87:283). This sensitivity can result in losses to the selling firm in the future due to altered customer buying habits. The worst case of this would be the outright loss of the customer to a competitor which would mean the loss of the present value of all the customer's future purchases (74:70). The determination of the set of reactions is a necessary first step toward determining the costs of a customer service failure. The purpose of the research is to investigate the reactions of one set of buyers to customer service failures and the implications of these reactions to the other members of the distribution channel.

### Background of the Problem

As a part of the "4 P's" of marketing strategy the level of customer service is a critical input in the marketing mix decision (54:6). The importance of customer service is not only true in the case of the "product," or "place" components, but also of the "price" component of the marketing mix. Product availability, an element of customer service, can be used to differentiate the product from its competitors if customers recognize the differing levels of customer service and are willing to pay for it (11:4; 54:8). Different levels of customer service can elicit different demand responses from customers; at a given price level, demand will vary with different levels of service provided (11:7).

Considering the importance of customer service, it would seem that the determination of the appropriate level of customer service to offer would be of great importance to top management. However, the cost associated with a given level of service is difficult, if not impossible, to measure (54:8). The difficulty stems from the inability to measure costs resulting from changes or failures in the level of customer service.

The penalty associated with a particular level of customer service is, not only the immediate loss of contribution margin from a lost sale, but also the present value

of the contribution to profit foregone by losing a customer (11:8). Implicit within any level of customer service are six elements: product availability, order cycle time, distribution system flexibility, system information, distribution system malfunctions, and post sale product support (44:24). Of these six elements, La Londe and Zinszer found that product availability was twice as important to buyers as any other element of customer service (see Table 1-1).

Table 1-1. Relative importance of the different elements of customer service for all types of manufacturers<sup>a</sup>

<u>Element</u>	<u>Importance</u> <u>(%)</u>
Product availability . . . . .	42.7
Order cycle time . . . . .	19.4
System information . . . . .	12.4
System flexibility . . . . .	11.6
Other . . . . .	<u>13.9</u>
Total . . . . .	100.0

<sup>a</sup>Source: La Londe and Zinszer, Customer Service Meaning and Measurement.

This combination of order cycle time and product availability is twice as important as the sum of the other elements of customer service. Thus, service failures in these two areas would be more likely to incur the types of

penalties discussed above. In their study, La Londe and Zinszer found that the importance of product availability and order cycle time was consistent for manufacturers overall, and was also the case for each individual industry they considered.

Any measurement of the penalties resulting from a customer service failure as an outcome of a given level of customer service would have to consider the type of service failure occurring and the resulting actions taken by the buyer in both the long-run and short-run. It is the dichotomy of stimulus and response with respect to service failure and reaction that is undefined by marketing analysts. As a result, managers suboptimize when dealing with logistics systems because of an inability to determine the penalties associated with a given level of customer service (59:25).

#### Determination of Customer Service Levels

The importance of customer service levels requires that they be determined correctly. The correct level of service for a firm is the level that allows the distribution system to maximize corporate profits. In order to accomplish this, the level of service, which will minimize the sum of the costs of service failures that result from a given level of customer service, and the costs of maintaining that level of customer service, must be determined. The

inability to measure the costs that result from a customer service failure prevents managers from identifying an optimum level of service.

Therefore, it is necessary to measure the penalties associated with a customer service failure before attempting to minimize total costs of a company's distribution system. Not only is it necessary to measure these costs after the fact, but it is necessary to have the ability to estimate these costs in order to select the best level of customer service. The ability to estimate these costs will enable a firm to determine the appropriate level of customer service without undue trial and error. If the reactions of customers to service failures are to be understood, it would seem correct to begin with the most important elements of customer service: product availability and customer order cycle time.

#### Product Availability

In talking about product availability, or the lack of availability, one of the major concerns is stockouts. Boot defined a stockout as "when a product is demanded and there is no stock to satisfy demand" (14:138). Barrett offers as a measure of product availability, "the sales of an item made immediately from stock divided by the item demanded" (6:10). Stockouts therefore are demand, less the amount of that demand which cannot be satisfied immediately from inventory.



At the wholesale level, however, a further definition of product availability is necessary. In the retail setting, a consumer usually purchases one or a small number of products; thus the potential for a partially filled order is small. At the wholesale level the orders are most often for large amounts of product. Therefore the potential for a partially filled order is many times greater. While a stockout represents a total absence of product, there remains the situation where a customer receives only a percentage of the amount ordered. In the grocery industry this is referred to as a "short-ship." The partial filling of an order has given rise to another measure of product availability: that of the number of line items filled on an order divided by the total number of lines. When measuring availability, one must consider both stockouts and short-ships.

#### Customer Order Cycle Time

Customer order cycle time is defined by Bowersox as "the time measured in days from the placement of the order to the receipt of the shipment." Bender expanded the concept to "note that the order cycle does not start when a customer's order is received by the supplying company, nor does it end when the goods are shipped out of the supplying company's warehouse. The cycle starts when the customer's inventory system needs replenishment

and ends long after the goods have been delivered to the customer" (11:10). If this definition is accepted, it is evident that some elements of the order cycle are under the control of the customer and the remainder lie with the supplying firm. The period of time from when the customer's inventory needs replenishment and the order is transmitted, along with the period from the receipt of the goods until the product is usable by the customer, are part of the order cycle but not controllable by the supplier. Yet, in these periods, problems can occur which can be of consequence to the supplier, especially in the period after the receipt of the product. While the order cycle time can be accurately measured only in terms offered by Bowersox, the supplier must be aware of the periods identified by Bender that cannot be controlled.

In order to plan an inventory system, a customer must be concerned not only with the average elapsed time of the order cycle, but also with the variance of the order cycle (30:49). The variance in the order cycle is one of the two types of uncertainty that safety stock must protect against (15:175). Order cycle time, and its consistency, are defined as "hard" measures of customer service which have impacts that can be directly measured (23:335). Order cycle time and cycle consistency are direct parameters of a customer's inventory system along with product availability.

Therefore, in this research, service failures are concerned primarily with product availability and customer order cycle time.

#### Reaction to a Service Failure

When measuring the cost of a customer service failure, immediate and long-run reactions of the buyer must be examined. When a customer encounters a service failure, some form of short-run or immediate reaction will be exhibited by the customer which will have costs to the supplier. The short-run reaction to the service failure will, in large part, determine the long-run reaction of the customer to a service failure. For example, if a customer substitutes another brand of product for the out-of-stock brand, it would seem more likely that this customer would not return to the original supplier than would be the case if the customer had back-ordered the product initially. Thus, the first step to minimize costs for a logistics system would be the understanding of, and the ability to predict, both the long-run and short-run reactions of a customer.

### Need for the Research

All previous research in this area has been done at the retail level (78:48). There has been little investigation of the effects of customer service failures on the buying decision within the physical distribution channel. With product availability viewed as an integral part of the supplier's marketing mix, what would be the effect of poor product availability (either stockouts or short-ships) on the remainder of the supplier's marketing mix? If the marketing mix is viewed as an integrated mix of elements, with each element affecting the performance of the other elements of the mix, then poor customer service should have a major impact on the effectiveness of the supplier's marketing mix.

In past research, the discussion of the level of customer service assumed a total lack of influence on the part of the other members of the distribution channel. It would seem apparent that the levels of service provided by suppliers, and the reactions to these levels exhibited by buyers within a distribution channel, would be affected to some degree by the relative amounts of power dispersed among the various channel members. Therefore, any study of the reaction to customer service failures within the distribution channel must include, not only the elements of the logistical systems involved, the type of failure,

and the reaction, but also must include the channel dynamics that are present in any relationship between two channel members.

#### Problem Statement

The concept of Business Logistics implies that customer service levels (which dictate the number of customer service failures) impact on all other elements of the logistics system (54:6). As a part of the "4 P's" of marketing, customer service impacts upon all elements of the marketing mix. The consequences of inadequate levels of customer service may not be limited to the cost of a lost sale, but may extend so far as to jeopardize the success of the remainder of the marketing mix.

The research has been designed to explore the set of reactions of buyers to customer service failures within the physical distribution channel. In addition to the reactions, some of the situational factors which help determine the specific reactions to a service failure are examined. The investigation of the situational factors includes an examination of the role of the channel variables (such as role, power, conflict, and communication) in the decision process that leads to reaction.

### Scope

The research was prompted by two stockout models presented in Chapter II. These two stockout models suggest that for any buyer-seller situation in the physical distribution channel, there must be a set of alternative reactions available to the buyer whenever a customer service failure is encountered. These two models also suggest that a decision process exists, mediated by many situational variables which determine the alternative chosen by the buyer.

The first goal of the research is to determine the long-run and short-run set of alternatives open to the buyer when a customer service failure is encountered. These alternatives suggest the effect that customer service failures have on the success of the marketing mix of the supplier.

The second goal of the research is the decision process that leads to the selection of an alternative. The determination of the decision process that leads to the selection of an alternative reaction involves the investigation of the variables considered in the decision process, and the different management levels involved in the decision process. Previous research has suggested that the decision process consists of the combination of a wide range of variables which constitute the buying

situations and the levels of management which are considering the service failure. Thus, this research is designed, not only to develop a set of long-range and short-range reactions, but also to identify the major variables affecting the decision, and the management members making the final decision.

### Research Questions

In developing the research, six areas of primary interest were identified through preliminary interviews. These six areas then became the focus of the actual research:

- A. What is the set of short-term and long-term reactions to service failures? This area includes the impact of the short-run reactions on the subsequent longer term reactions to service failures. Lastly, this area is concerned with the possibility of any relationship between the type of service failure encountered and the specific reaction chosen.
- B. What is the effect of the supplying company's marketing mix on the reaction decision? Specifically, this area is interested in the affect of the remainder of the supplier's product line and the promotion policy of the supplier on the reaction decision. Another area, of course, is in addition to the supplier's customer service policy which has resulted in the service failure.
- C. What is the impact of the competitive situation on the reaction decision? Specifically, this is the ready availability of substitutes for the product experiencing the service failure and the degree to which the substitute product is equivalent to the original product.
- D. What is the potential effect of previous levels of customer service and the time elapsed since the most recent customer service failure? Previous research has suggested that the choice of alternatives is heavily influenced by previous customer



service performance and the time elapsed since the last customer service failure (21:422).

- E. What is the effect of prior service on the reaction decision? Prior research has indicated that certain management styles have different behavior patterns in regard to the selection of suppliers of services and products (52:601). However, there is no indication in this literature that the reactions chosen by individual buyers should vary with the five demographic characteristics of age, education, income, job tenure, and race. There is, however, some indication that availability of information about alternatives, as well as the number of persons involved in the decision process, would have a bearing on the alternative chosen (75:51). Section E will investigate the relationships between demographic variables and the alternative chosen in addition to some measures of the decision-making group.
- F. What is the impact of marketing channel dynamics on the reaction decision? Of interest are the effects of roles, power, conflict, and communication in the marketing channel. Particularly interesting are the functions of channel power in the ability of the various channel members to force inventory, and risk onto other channel members.

### Methodology

The research consists of a series of case studies conducted in order to investigate the six areas listed as research questions. The case studies involve the determination of the set of alternative reactions to a customer service failure that are immediately available to a buyer, at the wholesale level. Secondly, the research attempts to determine any subsequent reactions by the buyers that are long-run in their effect. The case studies also

investigate the situational variables involved in the reaction decision.

In the case studies the cooperation of six grocery merchandising firms was sought. For each of the firms a case study was prepared involving:

1. The severity of each type of service failure. This consisted of the frequency with which each type of service failure was encountered and the problems that each type of service failure caused.
2. The available set of reactions that were perceived by the buying organization. This included both the short-run reactions as well as the long-run reactions that were perceived as being open to the organization.
3. The procedures within the company for deciding upon an alternative were explored. In this area the existence of any formal or informal policies was investigated along with the sources of information necessary to choose an alternative and any variables which were necessary to choose an alternative.

These case studies explored the effect of any situational variables on the choice of a reaction, including the effects of such variables as volume, gross margin, perceived brand loyalty for the individual product and the supplier's product line, the amount of promotional support provided by the supplier, the amount of customer advertising done by the manufacturer, previous listing of customer service, perceived available substitutes, and competition from other channels. The combination of these variables together help to define the role, power, conflict, and communication relationships within the channel. These areas are explored

in interviews with the officer responsible for overall grocery merchandising, the head buyer-merchandiser for the organization, and a sampling of the grocery buyers within the organization.

#### Limitations of the Study

Caution should be exercised in generalizing the results of the study because of the following reasons:

1. The study is limited to retail grocery chains and grocery co-ops in the upper mid-west.
2. The study involves only grocery products.
3. The study is limited to grocery channels of distribution.
4. The study suggests several variables present in the buying situation which seem to affect the reaction decisions. However, the research does not test these variables for significance in the reaction decision.

#### Contributions of the Study to Marketing Theory

It is anticipated that the research will be useful to those who are trying to develop a more meaningful theory of Business Logistics, within the field of Marketing, by taking the initial steps toward placing the consequences of a customer service failure in proper perspective in the general theory of Business Logistics:

1. Business Logistics is suggested as a study of the possible trade-offs involved in an organization's logistics system in an effort to design a system which will help produce maximum profits through

the minimization of total logistics costs (54:6). By understanding the possible consequence of a customer service failure it will be possible to begin to estimate the costs associated with any particular level of customer service.

2. Professional buyers either singly, or in combination, choose what course of action to follow after encountering a customer service failure. Some evidence is available in the literature that certain variables do affect the type of reaction exhibited in response to a customer service failure. The research further explores the relationship between these variables and the type of reaction these buyers exhibit.
3. Marketing literature postulates that one of the major factors influencing the conduct and operation of a physical distribution channel is the relative dispersion of power within the channel. The research provides an extension of this by investigating the relative ability of power within the distribution channel to affect the operation of the channel. This is with respect to which members incur the risk of carrying inventories as a result of customer service levels as well as the ability of power to mediate the selection of an alternative reaction.

#### Contributions of the Study to Marketing Practice

To simply theorize about the nature of trade-offs within a logistics system is of little significance to the marketing practitioner, unless guidance is available as to what should be done about consequences of a customer service failure and what benefits will accrue to the buyer if something is done about the consequences of a customer service failure. In short, what are the action-oriented implications of the consequences of a certain level of customer service? Specific potential contributions are:

1. Currently, when setting a customer service level, many marketers view the cost of a service failure as the cost of a lost sale (39:187). It is quite possible that the marketer using the cost of a lost sale as the consequence of a service failure may be underestimating the costs of a service failure. The research provides information as to all the potential costs that would be associated with a customer service failure.
2. The study provides information as to the feasibility of using the level of customer service offered as a means to differentiate a product offering from the offerings of the competition. It would appear that few, if any, marketers try to establish their ability to provide a better level of customer service as a differential advantage (11:10).
3. In order to estimate the types of consequences associated with a customer service failure for his own product, a marketer must be able to identify his own situation and the probable reaction that the buyer will choose. To this end, the research will find some of the relevant situational variables which help determine the type of reactions exhibited by a buyer to a customer service failure. By recognizing the effect of the situation on the reaction to a customer service failure, and the consequences of any particular reaction, the supplying organization can better estimate the actual costs that result from a customer service failure.

### Organization

The organization of the study consists of five chapters: (1) Introduction; (2) Conceptual Foundations: A Review of the Literature; (3) Research Design; (4) The Findings; and (5) Conclusions.

Chapter I introduces the study by stating its purpose and a brief background to the problem. The scope

of the research and research design is presented along with the potential contributions to both marketing theory and marketing practice.

Chapter II reviews the literature with respect to the discussion of the problem of calculating the costs of a customer service failure. The literature, with respect to the effect of power within the channel upon the type of reaction exhibited, is reviewed. The two pieces of previous research, which most directly influenced this research, are reviewed in some detail.

Chapter III sets forth the research design of the study, including the discussion of the interview guide, the development of the test instrument, the treatment procedures and statistical tests. Samples of the type of hypothetical situation and responses are included in Chapter III.

Chapter IV presents the six case studies done in the research. The findings of these case studies and the research questions are included in Chapter IV.

Chapter V briefly summarizes the purpose and research design and then presents a review of the major findings and conclusions. The chapter concludes with the implications of the research to marketing and suggests some directions for future research.

## CHAPTER II

### CONCEPTUAL FOUNDATIONS: A REVIEW OF THE LITERATURE

#### Introduction

Chapter II develops the underlying theoretical structure for the research by reviewing the literature related to the research questions. The literature review is divided into five sections:

1. General Dimensions and Implications of the Problem;
2. Effects of the Situations on Reactions;
3. The Chang Stock Depletion Cost Model;
4. Walter's Empirical Analysis of Two Stockout Models; and
5. Implications of Channel Theory on Stockout Reaction Decisions.

#### General Dimensions and Implications of the Problem

In the past decade the total cost concept has gained wide acceptance in the Physical Distribution literature (9:279, 15:327, 16:299, 7:274). The concept is based on cost trade-offs, the most common of these being the cost of a stockout versus the cost of carrying enough incremental

inventory to prevent the stockout (23:329). The trade-off between the cost of providing a level of customer service and the losses due to a failure in customer service is the topic of this paper.

Currently the cost of the service failure cannot be measured. Measurement is necessary to objectively compare the cost of a service failure with the costs necessary to prevent that failure (16:195). The cost of a service failure can be divided into several categories: duplicate order processing, extra communications, and the cost of less-than-truckload service or other expensive transportation costs. Other costs are: the loss in profit margin when a person delays a purchase, substitutes a purchase, substitutes another product, or buys a smaller size product (43:348). The so-called "soft" costs, that are seldom recognized or measured, include lost selling time, lost customer goodwill, and possibly most damaging, the potential for a lost customer (63:537).

Most inventory models assume the costs associated with a service failure to be fixed, or assume that these costs do not exist at all (7:193). Therefore, there is no measure for this critical cost used in the total cost model. Bowersox, Smykay, and La Londe noted in 1970 (16:196):



The vexing problem in balancing inventory costs and service revolves around this difficulty of measuring the impact of an out-of-stock condition. A stockout reflects immediate lost sales, which may or may not be measurable, and the potential loss of a permanent customer. The full impact of a lost sale is directly related to the customer service policies of competitors. A customer who is denied by one supplier and serviced by a competitor may become a customer again only through the use of substantial sales and promotional effort.

The situation has not changed. Today the same problems confront researchers in the area. There is still no method available to estimate the costs associated with a stockout (78:48).

Three types of cost information are required for inventory control: obtaining inventory, carrying inventory, and inventory stockouts. The first two types are out-of-pocket costs and the third is a foregone contribution to profit--an opportunity cost. The third type of cost has defied measurement and posed a problem recognized by researchers in the field of inventory control and costing.

Magee noted:

The cost of a lost sale, revenue losses, because the merchandise was not there when the customer wanted it, is extremely difficult to measure in most businesses. Even where the direct costs can be estimated from a tally of lost orders, it is hard to assess the affect on potential future orders from customers. In a competitive economy where costs of manufacturing are increasingly rigid, the "unit cost" of lost sales is probably growing in most businesses (59:10-20).

Magee's echo of Bowersox, Smykay and La Londe points out the very real threat that the costs of a customer service failure go far beyond the immediate costs which are often presumed to be the cost of a lost sale.

Alexander and Berg reinforce the position that, of the five cost elements involved in the trade-offs inherent in Business Logistics, the major remaining cost to be calculated is that of customer service failures:

It does not require mathematical genius to prepare from easily measured costs an equation or equations that will yield an economical inventory figure and an optimal order quantity. The only one of these costs that is apt to be hard to quantify is the loss of business through stock-outs (3:187).

Scheele, Westerman, and Wimmert supported this position when they discussed the optimum customer service level within a logistics system. They point out the sole reason for the inability to find the optimum level of customer service:

Theoretically, the safety stock levels should be so established that the costs of maintaining it equals the cost of stockouts it prevents. However the criterion is not normally used because of the difficulty of putting an accurate dollar figure on the cost of stock-outs (73:107).

Fetter and Dalleck tended to ignore the importance of accurate measurement of depletion costs. However, they too added a caution that crude techniques of cost measurement might invalidate any solution yielded by an optimizing model (34:v).

Magee discussed principles for defining costs used in distribution studies involving inventory and customer service levels. Magee stated that the costs should be out-of-pocket costs, either in cash or foregone profit opportunities, and should represent only those costs which are affected by distribution system changes. Magee criticized the practice of ignoring cost factors which may not be readily estimated while continuing the use of existing measures that are accurate, but not applicable, to the distribution study. Magee concluded (59:99):

If major errors are to be avoided, it is more important that the right costs be recognized and estimated even roughly than that data be gathered under irrelevant cost definitions for the sake of precision.

It would seem necessary, when using an inventory model, to know all of those costs and accept the risk of rough measurement to approach the correct service levels. The current practices have resulted in the sin of omission, imprecise inventory and service levels. The result has been that many managers have found themselves in the situation described by Ammer without the necessary information to defend themselves (5:347):

In general management tends to over protect themselves against stockouts. All too often they are unwilling to accept the idea that if they want tight inventory control they must be willing to risk an occasional stockout. It takes a courageous manager to risk running out of stock when he knows it pays to take risks. When the stockout

does occur, his boss is all too likely to think only of immediate loss and forget the enormous gains that come from low safety stocks and close control.

Thus, there is a need for a system to estimate the costs associated with a stockout or other service failures. To obtain such a system, there will have to be a mechanism for measuring the costs in both the short-run and long-run. Costs will occur immediately, resulting from the customer's reaction to a service failure in the short-run, as well, there will be long-term losses resulting from the damage done to customer goodwill. As Bowersox, Smykay, and La Londe noted, once a customer has switched to a competitor it may be very difficult to regain the customer's business.

#### Effects of Situation on Reactions

It may be possible that a customer's reaction to a service failure will prove to be situation specific depending upon several variables and their interactions. In research focused on the members of the distribution channel the role of the purchasing organization in the particular channel of distribution, and the relationships within that channel, may be found to be very significant.

Lusch found that sources of power available to the channel leader had significant impact upon intrachannel conflict (56:383). If the purchaser sees the use of service levels by suppliers as an exercise of power in

a negative manner, it would have a great effect on the purchaser's reaction to a customer service failure. If the hypothesis offered by Lusch is accepted, it would be expected that, if a purchaser perceived the service level of the manufacturer as an extension of negative types of power, then the purchaser would react more harshly to a service failure than he might otherwise.

The channel leader may have power sources because of specific characteristics, experience, or history of the firm (32:68). However, the channel leader's power may only reflect the environmental forces acting upon the channel. The levels of customer service offered, and the resulting levels of safety stock carried, may be a clear example of the exercise of power and countervailing power within the distribution channel (31:68).

While channel power may be important, the product type and its characteristics may have the greatest impact upon a purchaser's reaction to a service failure. Lehman and O'Shaughnessy noted that the buyer's choice between competing products may be predicted from the knowledge of the position of that product relative to competing products on a set of attributes relevant to the product. The one factor ranked highest across all products was reliability of delivery, which is a physical distribution measure. However, for specific product types, the importance of reliability of delivery varied (55:34).

In addition to channel and product variables, the personality and management style of the individual buyer who is responsible for the purchasing decision, may have a great deal to do with the reaction to a service failure. Sheth notes that such factors as background of the individual, degree of perceptual bias, information sources, and satisfaction with previous service may have a very significant impact upon the individual buyer's decision (75:51). Wilson and Little found three distinct decision making styles: conservative, normative, and a cross of normative-conservative styles (88:40). These decision-making styles impact upon the reaction to a service failure.

The type of purchase decision which results in a service failure will also have its impact. Whether or not the buying decision was a straight rebuy, or a modified rebuy could well have a significant impact on the type of reaction taken to a service failure. All of the aforementioned variables will have their affect on the type of reaction that will be exhibited to a stockout.

It will be useful, then, to examine in some depth the research that has investigated the reactions of consumers to a service failure. These pieces of research lay the groundwork for this investigation of service failures. The first model was developed by Yu Sang Chang, the second, by Clyde K. Walter. These initial steps provide a

structured method for viewing the circumstances surrounding a service failure and the various alternative types of reactions that are open to the purchaser. The end result in each case was a model for calculating the expected monetary value (EMV) of a stockout.

#### The Chang Stock Depletion Cost Model

Chang's model was developed to measure the stock depletion costs for a metal wholesaling firm. Unlike most retail situations, the model allows for different lead times to be accepted by customers. Product substitution was not part of this model, as most customer needs were precisely defined by engineering specifications. Branding was also insignificant.

In this basic model lead times were initially given by the wholesaler for the items that were ordered. If a customer accepted these lead times, this was termed an acceptance. If the item ordered was out-of-stock, an extended lead time would be offered to the customer. If the customer accepted this extended lead time the action was termed a postponement. If the supplier judged that he could meet the lead time requirements specified by the customer, including any postponement, the order was accepted. Then the buyer would confirm the order, thus halting search for another source of supply. The particular

order was then filled, incurring some added costs for expediting which were paid at the compensation step.

In the more involved portion of the model, the short lead times were not postponed. In this case, the supplier could either accept the order, or withdraw from contention for this particular order. If the supplier chose to withdraw, the customer was forced to search elsewhere for the desired items. This was termed a departure. Chang explained this crucial step (22:430-431):

The outcomes following a departure are potentially the most costly to the supplier. If, for the item involved, the buyer comes back to the same supplier for his future requirements despite the fact that this source could not meet them the last time, the outcome is termed a "return." The only damage to the supplier in other words, is the loss involved in a single lost sale plus any effect on "goodwill." On the other hand, the buyer following a departure may send his future orders for this item to another source of supply, such as the warehouse which met his needs following the departure from the original supplier. The loss in this event is not confined to a single order, but involves the loss of all future orders as well for this particular item. These consecutive losses are termed "cessation." Finally, a cessation may trigger another alternative set of events that are called "continuation" and "termination" respectively. A continuation results when the buyer continues to place orders with his original supplier for all items except the one involved in the cessation. A termination occurs when, as the result of an immediately preceding cessation, the buyer also decides to sever all relations with the original supplier. The latter's loss then is extended to include the future sales of all other items typically purchased by the buyer from this supplier. In other words, the termination is the complete loss of a customer.



By assigning values to the individual outcomes and the probabilities of each chance move, Chang calculated the expected monetary value (EMV) of a single stockout (22:437-442):

- termination = \$50,000
- continuation = \$0
- compensation = \$20 to \$50 (this payment depended upon the amount of expediting effort).

For measuring the effects of repeated stockouts, Chang discussed the concept of the "period of cognition." This period was the time during which a customer, faced with another departure, would be affected by any previous departures (15:436).

Consider a sequence of two departures involving one inventory item. The likelihood that the occurrence of the second departure would result in a cessation could certainly be greater where the interval between the two departures was only four months than would be the case where the interval between the two occurrences was eighteen months.

Repeated departures were treated as a Bernoulli process with the two possible outcomes being either a departure or a nondeparture. These would be followed directly with a withdrawal or an acceptance. The probability of a withdrawal, hence of a departure, was chosen as .15. The cost of the first departure was \$105 and the cost of a second departure was calculated to be \$705. The

cost of a nondeparture was calculated to be \$39. The model was extended to provide a general equation for calculating the expected cost of the stockout given in preceding departures within the period of cognition (19:436).

The cognitive period was recognized by Chang as a problem area. An exponential function was assumed to describe the probability of cessation over time (see Figure 2-1). In actual calculation, a simple step function was used. Several assumptions were developed pertaining to the concept of a period of cognition (22:442-444):

1. The period of cognition is based on the seriousness of a typical instance of departure as it would be almost impossible to ascertain the degree of seriousness for every case.
2. The duration of a cognitive period may be affected by the number of instances of unsatisfactory service following a departure and their value to the buyer.
3. The occurrence of a second or third departure during one cognitive period may serve to lengthen the cognitive period.
4. The usage of an exponential distribution is no more than an approximation to the shape of a "retention" curve. The psychological evidence to support this is not great.

In another article from the same study Chang summarized his findings (21:365):

. . . It was shown that the major determinant of stockout cost was not the size of the order but the subsequent reaction of the customer who had encountered the stockout case, and the customer's reaction depended largely on the frequency of prior stockouts he had experienced during the relevant time period.

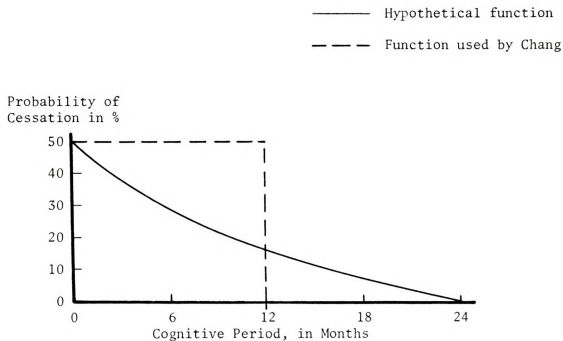


Figure 2-1. Theoretical and Simplified Exponential Distributions for the Departure of a Customer.

Source: Yu Sang Chang and Powell Niland, "A Model for Measuring Stock Depletion Costs," *Operations Research* 15 (May-June 1967): 445.

In Chang's study a stockout typically involved an order for several hundred units of a metal product. Except for emergencies, a lead time on the order of several days was the industry norm. Here the term stockout, as used by Chang, was not only a measure of availability, but also of order cycle time. Such a failure would be more involved than a service failure simply involving availability. In this case a product might be available, but for some reason, the ability to deliver within the specified lead time might not have been possible. Thus, the twin areas of both availability and order cycle time must be examined.

Chang introduced several interesting concepts when he attempted to measure the cost of a stockout. The most important of the concepts being that of the cognitive period along with the recognition of a termination and a cessation. In addition, Chang espoused the concept of the expected monetary value for each service failure. One of the major shortcomings of this research, however, was the special nature of the product limiting the applicability of the study. In a subsequent dissertation, C. K. Walter continued with the line of investigation begun by Chang.

#### Walter's Empirical Analysis of Two Stockout Models

Walter recognized that Chang had been using a very specialized setting, where the alternatives facing a

customer when confronted by a stockout were few, and represented a special case for only the metals market. Therefore, Walter felt that it was necessary to establish a model of the decisions and alternatives facing the consumer in the retail environment.

Walter developed a model to explain the alternative choices facing the customer who enters the retail outlet with the intention of buying a specific product and encounters a stockout (86:55-56). If the product is in stock, the purchase will be made and the customer's requirements for that item will be satisfied. However, if the product is not in stock, the customer must decide upon an alternative course of action to the one he had planned. Walter explained (86:56-57):

. . . He may substitute brands in various price ranges, substitute another size of his first choice brand, delay his purchase until the store has received a new shipment of the first choice product, or he may take his business to another source of supply.

Each of these alternatives has a consequence for the retail outlet in terms of the revenue difference between the customer's original purchase intention and the subsequent alternative selected. For any of these, the result may have either a positive or negative revenue gain, except for the situation where the customer switches to another source of supply.

With the alternatives open to the customer identified (see Figure 2-3), and the revenue gains (losses) identified as measurable, Walter was ready to apply the empirical data he had collected to the model. Walter achieved an accurate measure of the revenue consequences and the associated probabilities for each consumer alternative. The result consisted of a calculation of the EMV/unit of unfilled demand (86:59). The next step was to investigate the result of a second stockout during the cognitive period.

The case of a second stockout during the cognitive period revealed that the probabilities for each alternative would change significantly. The probability of the customer switching from one outlet to another rose from 14.1% to 39.9%, an increase of almost three times. The occurrence of a third stockout during this period increased the probability even further. Thus, it can be seen that the greatest damage to the retail outlet would occur with the second stockout during the cognitive period. In this case, the expected value of the second stockout was -\$2.08 as opposed to -\$1.26 for the initial stockout.

The cost of the second or any subsequent stockout may, in reality, be much greater. If a certain percentage of the 40 out of 100 people who would be expected to switch locations after a second stockout during the cognitive

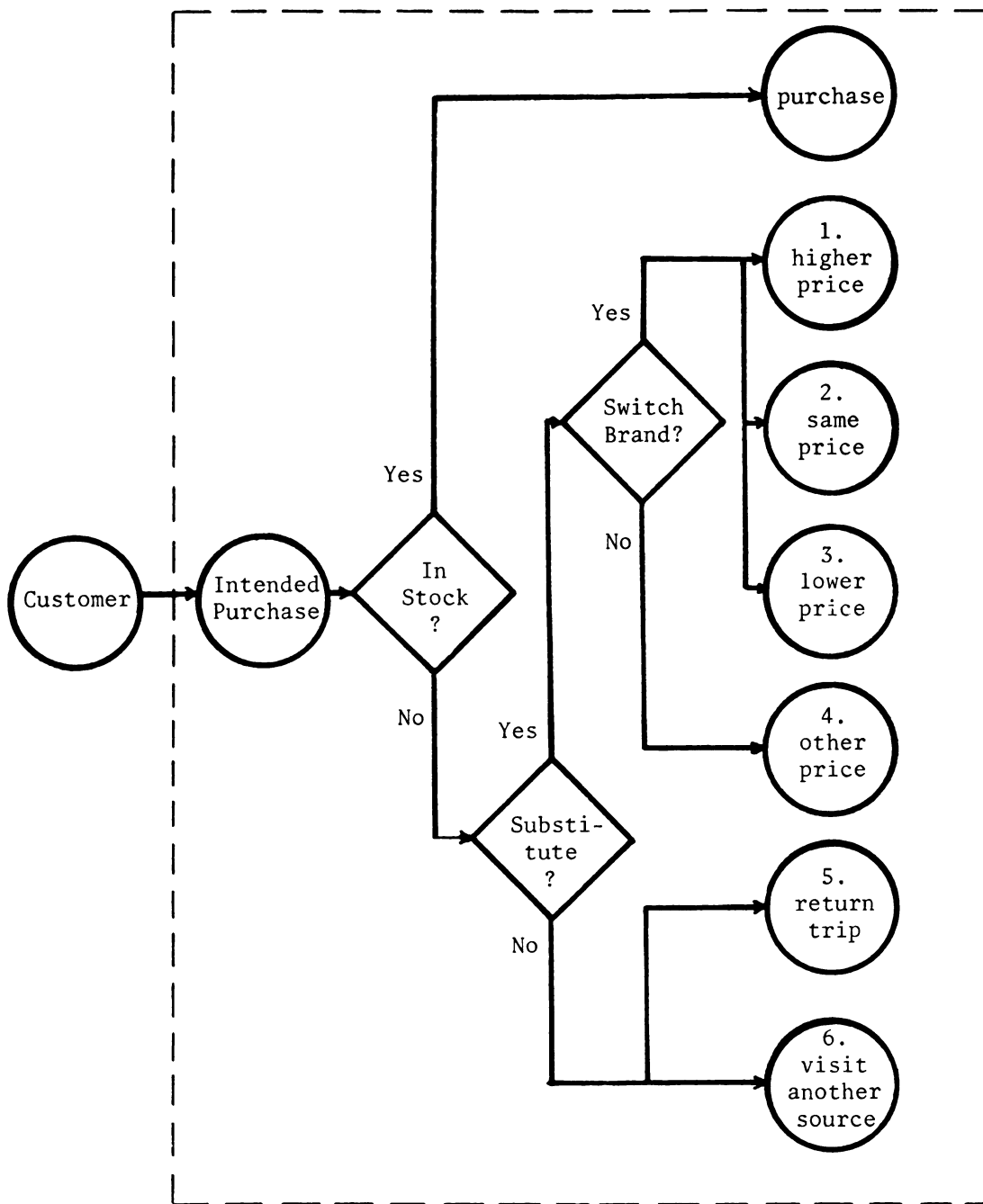


Figure 2-2. Basic Stockout Model.

Source: C. K. Walter and John R. Grabner, "Stockout Cost Models: Empirical Tests in a Retail Situation," *Journal of Marketing* 39 (July 1975): 56.

period would terminate all business with the original supplier, the loss would be the net present value of all future purchases. The result would be a loss of \$344.52, which would increase the EMV of the stockout drastically (85:113-124).

Walter went on to attempt to predict the decisions made by consumers on the basis of product group (liquor types) and demographic variables. He also attempted to determine whether or not the cost of a stockout varied significantly across product groups. Walter concluded that certain customer decisions pertaining to the single stockout situation vary according to the product group involved. Walter also concluded that the costs to the retailer also tend to vary depending on the product group selected. Lastly, customers who encounter repeated stockouts tend to make decisions that are dependent upon the type of product which is not in stock (85:164).

Walter was not able to distinguish significant differences in behavior on the basis of the demographic variables in the study. The only exception to this was age. Walter found that younger people were more inclined to change locations than to substitute (85:164).

Walter was, however, able to distinguish clearly the choices that were confronting a consumer when a stockout did occur. He was able to establish that the decisions made



by consumers when confronted by a stockout, tended to vary across the different liquor groups being considered as well as liquor store types. In addition, Walter was able to determine that the costs to a retail outlet also varied across the product groups being considered. The chief contribution of this research is the identification of the set of alternatives open to a consumer when confronted by a stockout in a retail setting:

1. Substitution
  - a. to a higher priced brand of greater quality;
  - b. to a brand of the same price and quality;
  - c. to a lower priced brand of supposed lower quality; or
  - d. to a different size of the same brand.
2. Backorder (make a return trip at a later date).
3. Change sources of supply.

Walter's research added to, and built upon, the system initiated by Chang. The research extended Chang's system to the retail level and identified the alternatives open to the consumer. Walter was also able to identify the specific choices made by consumers and their reactions across the various product groups in the study. The problem with Walter's findings is their applicability to generalized situations. Like the concepts of EMV and cognitive period, the identification of the six alternatives in a retail

setting is a valid and valuable contribution to the body of knowledge. Unfortunately, it is difficult to generalize reactions to a stockout on the basis of Scotch, Gin, and Whiskey. A more universal method of describing the product would have made this research more useful to the practitioner and to future researchers.

#### Implications of Channel Theory

Chang's stockout model dealt with service failures within the distribution channel, while Walter's model was concerned with a retail situation which is considered to be outside the distribution channel (82:154). In both cases, consideration was given only to the buyer (or buying organization) and the specific product being transferred. In the case of Chang's model, there may have been an oversight in the elimination of channel effects from the reaction decision. There may have been some variance in the reaction to service failures if the effect of roles, power, conflict, and communication had been included.

Each member of the distribution channel occupies a position within the channel that is defined by the functions the member performs (82:157). As members alter their activities and the functions they perform in response to changes in the task environment in which the channel operates, conflict may result. As a member continues to be successful,

the other channel members come to regard this channel member's actions as customary. The other channel members will come to prescribe the behavior of the channel member in accordance with his past actions, and overtly enforce their expectations by means of sanctioning behavior (82:161).

Thus, any attempt by the individual channel member to deviate from the prescribed behavior expected by the other channel members will be met with sanctions, i.e., punishment. A supplier who decreased his customer service levels, or failed to deliver the accustomed level of service, would face reactions to the change in the prescribed role performance. The other channel members, through negative reactions, would enforce their concept of how the channel member should perform. The supplying organization's success in changing service levels would, in large part, be a function of its power in the distribution channel (81:99).

Power in the distribution channel is a relative concept. The level of power that has accrued to a channel member as a result of various sources of power is not the issue. The power of a channel member relative to the power of another channel member is the key issue (81:101). The net accumulation of power of one channel member versus another, gives the superior channel member some measure of influence over the actions of the inferior channel member. According to John Schloper (81:99):

O's power over P is defined as the net increase in the probability of P enacting a behavior after O has made an intervention, compared to the probability of P's enacting the behavior in the absence of O's intervention.

The power distribution within the channel could have a significant affect on the reaction decision made following a service failure. Given a situation where the supplier is the dominant member of a buyer-seller dyad, it would seem reasonable that the buyer reactions to a customer service failure would be less injurious to the supplier (severe) than if the power relationship was reversed (70:30). Thus, the power relationships in the distribution channel would be expected to help determine the type of reactions that can be chosen following a customer service failure.

The level of power belonging to any particular channel member will depend on the sources of power available to that channel member. Access to specific power sources such as economic rewards, coercion, expertise, or legitimacy allows channel members to accumulate power and to exercise control in the distribution channel (31:254; 79:383). Two of these sources, rewards and coercion, are the most readily applicable with respect to the reaction decision. The case of coercive power is similar to that of reward power and it is often difficult to differentiate the two forms (81:96).

The possession of a scarce resource, which represents the means to achieving a goal for the other firms in the channel, will constitute both a reward and coercive

source of power within the channel (81:96). The holding forth of this scarce resource constitutes a reward to the receiving firm, while the withholding of the scarce resource can be construed as punishment, and therefore, as coercion. In a monopolistically competitive market characterized by differentiated products, a well differentiated product or service would represent such a source of power. Stern and Bier noted (81:98):

A differentiated product or service represents a scarce resource to the firm which desires to resell it. If consumers specifically demand a manufacturer's product, then intermediaries, e.g., retailers and wholesalers, are more likely to submit to the producer's demands regarding such activities as service, price maintenance, advertising, and the like, as a requirement for participating in its distribution. . . . The amount of differentiation which a product possesses will determine, to a significant extent, the amount of power a producer can exert.

A manufacturer who possesses one or more well differentiated products would seemingly be in the position where a wholesaler or retailer would have little chance to react severely to a customer service failure without fear of punishment.

In any social system, when a component perceives the behavior of another component to be impeding the attainment of its goals or the effective performance of its functions, an atmosphere of frustrations prevails. A state of conflict may be said to exist when two or more components of any channel become objects of each other's frustrations (82:156). Thus, a customer service failure can be viewed as

the seed for conflict within a distribution channel. Logically, the first reaction to frustration is an attempt to remove its cause. In a social system, an effort by one component to change the behavior of other components is the exercise of power (82:161; 70:72). However, a channel will remain a viable network only when the subsystems are willing to remain within the system. Each unit is induced to participate in a channel of distribution by the promise of certain rewards for its supposedly unique potential contributions. If, therefore, a supplier's service policies lead to such a number of service failures that the wholesaler or retailer cannot achieve their goals, the system will collapse due to the severe reactions taken by the buyers.

If the level of the buyer's reactions to a customer service failure is severe this can be viewed as a high level of conflict within the channel. If this conflict is serious enough, it could be fatal to the channel. When the buyer's reaction is benign with respect to the manufacturer, conflict will have been avoided. The manner in which the channel members manage this serious source of potential conflict would seem to be an important affect on wholesaler's and retailer's reactions to a customer service failure.

Communication is another means of coordinating the behavior of components of a distribution channel. Ineffective communication leads to uncoordinated behavior, which

is likely to precipitate conflict within the channel (82:160). McVey notes that, despite the need for adequate procedures of communications and the need to avoid selective perception, many manufacturers, while presumably placing a great amount of emphasis on the need for coordination within their channel, often do not reveal any new promotional plans to their reselling channel associates until the promotions are enacted (81:160). The role of communications within the channel is recognized. Without effective communications between channel members, conflict can rise to intolerable levels. Thus, communication could reasonably be expected to have an important affect on a buyer's reaction decision following a customer service failure.

#### Summary

Hutt and Speh noted that all future research into reactions to a stockout must be generalizable to more than one or two situations. The research must address questions such as importance of the purchase, time pressures, evoked set of reactions and brand loyalty (78:24). Therefore, while Chang and Walter must be recognized for their contributions to this area of knowledge, their errors of omission must also be recognized. The ability to generalize from research conducted in a state-owned liquor store is questionable. To build upon the groundwork laid by these

two previous pieces of research, further studies must address the relevance of situational variables such as the channel variables of role, power, conflict, and communication. Thus, while realizing the value of previous research into the area of purchaser reaction to stockouts, the areas that will require more investigation are apparent.



## CHAPTER III

### RESEARCH DESIGN

The purpose of this chapter is to present the methodology, which was developed on the basis of the literature review in Chapter II, and to structure the remaining research design so that the methodological framework can be implemented. The chapter has the additional goal of presenting a clear and complete description of the methodology so that the research findings can be supported or denied.

The complete research design is presented in six sections entitled:

- Case Study Structure;
- Framework for Data Collection;
- Data Analysis;
- Pretest;
- Sample; and
- Interview Guide and Technique.

#### Case Study Structure

The literature review in Chapter II served as the basis for the construction of a case study method to be used in examining the purchasing organization's reaction

to customer service failures within the distribution channel. Each case study is comprised of four areas: (1) The frequency and severity of each type of customer service failure; (2) The available set of reactions perceived as open to the buying organization (the evoked set of reactions will cover both the short-run reactions as well as the more long-term reactions); (3) The internal procedures within the buying organization for arriving at a reaction decision; and (4) The major variables which are included in the consideration which leads to the reaction decision.

Three of the four areas in each of the case studies are derived from the research questions as they were listed in Chapter I. The first area of the case studies is the exception; this area will define the extent of the problem within each firm. The second section of the case studies is a direct application of Research Question A. The third section corresponds directly with Research Question E. The last section of the case studies combines the four remaining research questions to define the situational variables that will affect the reaction decision.

#### The Frequency and Severity of Each Type of Service Failure

The first area establishes the degree of seriousness with which the company views the problem of supplier's

customer service failures. The seriousness of the problem will reflect itself in the type of records the company maintains on the various supplier's performance with respect to customer service. The concept of customer service will be used as it is defined by the company.

The measurement of the level of customer service by the firm will also include any additional areas considered important to the buying organization. While La Londe and Zinszer indicated that product availability and order cycle time were the most important areas of customer service to the buying organizations, on an individual basis, any of the participating companies could rank one of the other service areas, or some entirely new factor, higher in importance than availability and order cycle time.

Thus, the impact of customer service failures on the company's operations will be investigated. Affects of the type of service failure will consider the severity of impact of different types of customer service failures on the buying organization. To what degree must a product be unavailable or the order cycle time vary to cause problems for the buyer?

#### The Perceived Set of Reactions

The perceived set of reactions available to the buying organization will be divided into two areas: the short-run, immediate reactions, and the longer-run reactions.

The short-run reactions will consist of the evoked set of each buying organization immediately upon encountering any type of customer service failure, as defined by the company. The set of reactions will be the equivalent to the set of alternatives defined by Walters in his model of consumer reactions to a retail stockout (84:76). Of considerable interest here, is the comparison of alternatives perceived by members of the distribution channel, as opposed to those identified by Walter for the consumer market which lies outside the distribution channel.

The long-run reactions consider the reactions of the buying organization subsequent to the initial reaction to a customer service failure. The longer-term reactions can be seen as results of one or a number of service failures. Longer-run reactions are expected to be very broad in scope. In a more generalized sense, long-run reactions are not reactions to a single service failure, but rather, to the overall level of customer service provided by the manufacturer, as perceived by the buying organization.

#### The Internal Decision Process

Once the buying organization has encountered a customer service failure there are a variety of responses that can be exhibited, ranging from "do nothing," to quite extensive and far reaching actions. Of prime concern, is who within the organization makes the reaction decision and

what other elements of the organization must be consulted before making the decision? La Londe and Farouk examined decision making in the instance of motor carrier selections and found widely varying styles across the range of companies considered (52).

Variables Included for Consideration  
in the Decision Process

Internal records of the company and the individual(s) involved in the decision process are not sufficient to examine the reaction decision. There are other variables that are included from the buying situation for use in the reaction decision. These variables, from both outside and inside the buying organization, must be included to better understand the process which leads to the selection of a reaction(s) to a customer service failure.

The decision maker(s) in the reaction decision process would be expected to consider some set of variables which would describe the particular seller-buyer dyad involved in this customer service failure. The variables considered would describe the buying situation as discussed by Belk (10). The literature suggests several variables, such as past performance and time elapsed since the most recent service failure (21; 19). In addition to the supplying company's product mix, the buying organization's competitive situation, and the degree of differentiation

for the product in question should be considered (10; 56; 82).

In summary, these four areas will constitute the case studies used in this research. The four areas will cover the magnitude of the problem, the set of reactions possible in response to a service failure, the decision process used to arrive at a specific reaction, and the variables included in the decision process.

#### Framework for Data Collection

For the investigation of reactions to customer service failures the following information was necessary.

1. The frequency of the three types of service failures identified in the research:
  - stockouts,
  - "shortships", and
  - order cycle time.
2. The severity of the above listed service failures as perceived by the buying organization. This represents the way in which the buying organizations regard the service failures as well as the overall service policies of the supplying companies.
3. Any other types of service failures which are considered important by the buying organization.
4. The impact of any of the above mentioned customer service failures on the operations of the buying organization.
5. The types of records kept by the buying organization on the levels of customer service provided by its suppliers.
6. The set of short-run reactions perceived by the buying organization as available in response to a customer service failure.

7. The set of longer-run reactions perceived as available by the buying organizations in response to the overall service policy of the supplying organizations.
8. The title of the manager(s) making the reaction decision within the buying organization. This will include the level of the manager within the organizational hierarchy and whom he reports to.
9. The management personnel that are consulted by the decision maker in the course of the decision process.
10. The set of variables which are included in the decision process by the manager making the decision and any other management people he consulted. These variables might include:
  - the degree of differentiation of the product under consideration;
  - the competitive strength of the remainder of the supplier's product line;
  - the past performance of the supplier with respect to customer service;
  - the time elapsed since the supplier's most recent customer service failure;
  - the competitive situation of the buying organization;
  - the level of advertising, promotional, and other types of support offered by the supplier;
  - the marketing functions performed by the buying organizations; and
  - the level of communication within the distribution channel.

### Data Analysis

Because the data gathered for this research was not collected from a randomly selected group of respondents, standard statistical tests cannot be applied. However, the research questions listed in Chapter I require some degree of analysis; the intended methods of analysis are listed below.

The first research question dealt with the short- and long-run reactions to customer service failures. The question concerned the development of a set of both short-run reactions to an individual service failure, and the development of a set of long-run reactions directed at the overall customer service policies of the firm. The research question was dealt with, both in the literature review and the section addressing the case study structure in this chapter. The final set of both types of reactions will be a composite of all six case studies.

The second research question called for the impact of the manufacturer's marketing mix on the reaction decision. Measurement of the impact calls for a study of the reactions of a buying organization to a service failure and a comparison of the difference in types of reactions with the decision maker's assessment of the strength of the supplier's marketing mix. Specifically, the question addresses the customer loyalty to the manufacturer's brand name; the degree of differentiation of the individual products in the product line, as well as for the product line as a whole; the promotion policy of the supplier; and the types of support, such as advertising or financial support offered by the supplier.

The third research question involved the affect of the competitive situation on both the buying organization



and supplier. The question is related to Research Question Two, in that the level of competition for the supplier's products will, to some degree, be a function of the level of differentiation of the supplier's product and remaining product line. To the extent that a product is differentiated, there are few ready substitutes available from the consumer's point of view.

The buying organization's competitive situation will consist of the level of loyalty received from their customers and the number of major competitors in their own market. The store competition is a test of the available substitutes that the next participant in the channel would have for the supplier's products whether the subsequent channel member is a retailer or final consumer of the product.

The fourth research question addressed the potential effect of the previous levels of customer service offered by the supplier. The previous level of service was coupled with the time elapsed since the most recent customer service failure for the supplier. The research question was suggested by Chang's concept of the Cognitive Period (21; 22). The amount of time elapsed since the most recent service failure and the perceived degree of prior service offered was compared with the reactions chosen, to try and determine if there is any basis for continuing research.

It is important to note that the level of service offered in the past by the supplier was the level perceived by the decision maker, which might not be the actual level offered. The perceived level of service was a function of the record keeping the buying organization does with respect to the number and type of service failures for a supplier. The worse the record keeping, the more subjective the decision maker's perceived idea of the prior level of customer service will be. To the extent that there is no official record of service levels, the time elapsed since the most recent service failure is also important. With an absence of customer service records, the companies committing the most recent customer service failures would be perceived as offering the worse level of customer service.

The fifth research question involves the management process used to determine the specific reaction to a customer service failure. The research question involves determining the member(s) of management who make(s) the final reaction decision. In addition to the other members of management, the managers consulted and their levels in the organizational hierarchy were determined. To this end, the manager(s) making the reaction decision and the level in the organization he occupies, and the other management people who have control over the decision maker's choice, were compared to the long- and short-run reactions exhibited by the company.

The sixth and last research question involves the investigation of the effects of channel variables on the reaction decision. These variables are roles, power, conflict and communication. The question of roles involves the prescription of the buying organization for both its own role and the role of the suppliers. The role prescription was compared to the role actually played by the supplier to determine the difference in the role played, and the prescribed. To the extent that the role expected by the buying organization and that actually played by the supplier are different, conflict within the channel can result.

The initial effort by either party confronted by conflict in the channel is to exercise their power either through reward, coercion, or some other means in an effort to resolve the conflict. In this research the sources of power, to either the supplying or buying organization, are examined and compared in light of the reaction(s) exhibited. Thus, the research calls for an examination of the sources of power available to both sides in this buyer-seller dyad.

The primary sources of power available for the supplier are a well differentiated product with a strong consumer franchise (81:94). Power resulting from a differentiated product would be in addition to any power that the supplier might receive as a result of dependence created

through the offering of advertising, promotional, financial, or other types of support. These sources will be examined in addition to any potential power derived from expert or legitimate sources.

For the buying organization the primary source of power is the control of a scarce resource; the access to the market that the buying organization serves. This represents either a reward or coercive source of power to the buying organization. The greater the loyalty of the market to the buying organization, the greater the power of the buyer.

Conflict and communication will be jointly examined. The effect of conflict would be expected to be a heightening of tensions within the channel and more drastic reactions than would normally be the case (56:384). A channel that exhibited a high level of conflict would be expected to also exhibit more serious reactions to service failures than would be the case in a channel with less conflict.

Communication would be expected to reduce the level of conflict in the channel. Communication leads to a closer alignment of the expected and actual roles played by the channel members, as well as encourage negotiation as a solution to channel conflict. Thus, the better the communication level in the channel, the less drastic the reactions to a service failure.

### Pretest

The research is an attempt to determine the set of reactions to customer service failures open to members of a distribution channel. It was felt that the grocery industry with its wide range of goods, well-defined channel, and numerous transactions, would present an excellent setting. A pretest was undertaken to verify the initial assumptions about the grocery industry and to test the methodology developed. By acquiring some first-hand knowledge about the methodology, any problems in applying it and the time required for each company, could be determined.

Initially, an interview was conducted with an authority on the interface between grocery manufacturers and organizations performing the wholesaling function in the grocery channel. From the interview an appreciation of this buyer-seller relationship was gained. It became apparent that a set of both long- and short-run reactions would be exhibited by buyers. However, the problem would be identifying the variables which would determine the reaction exhibited.

The variables suggested as most likely to determine the reaction to a customer service failure were channel variables. Unfortunately, the channel variables were esoteric in nature; for example, power. The difficulty in measuring channel power lies in determining the sources

of power for both the buyer and seller involved in a service failure and the relative power for each. In order to assess the channel variables, a series of case studies was felt to be the most appropriate methodology for exploring this area.

The next step was to test a prepared interview guide and a survey questionnaire in a grocery-buying firm. The pretest was conducted during two four-hour sessions with managers of a medium-sized grocery chain which performed its own wholesaling operations.

The interview guide was chosen because it provided better information than the questionnaire. During the pretest the interview guide and interview process proved to be very adept at developing the information necessary to construct such measures as roles, power, and conflict within the distribution channel. The reasons offered by the managers were that the interview would allow them to better relate their information and that a buyer or manager for a grocery company would be far more likely to cooperate in an interview than with a mail questionnaire.

#### Sample

Six companies make up the sample. Three companies are retail chains performing their own wholesaling function, two are wholesaler sponsored cooperatives, and one is a retailer sponsored cooperative.

There were certain criteria for the selection of companies for the research. The companies would lie in the upper-midwest and have a minimum sales volume (retail price) of \$500,000,000 annually. The location requirement ensured no effect due to regional differences in operating practices, competitive actions, or consumer buying habits. The size requirement eliminated differences due to scale of operation or managerial responsibility.

#### Interview Guide and Technique

Initial contact with the companies was made by mail. In every case, the primary contact within the company was established initially with the Vice President of Merchandising. The purpose and goals of the research were explained to this executive. This led to a follow-up mailing of a more detailed proposal to four of the organizations, outlining the data requirements, the time requirements of the executives being interviewed, and a statement of proprietary interest.

The initial phase was followed by telephone conversations and a visit to the company to discuss the project with the Vice President of Merchandising and usually the executive responsible for purchasing activities. At this point the project was either terminated or appointments were made to return and begin interviews with the appropriate management personnel.

At the conclusion of the research the participating companies received a report listing the findings of each of the six case studies. The company would be aware only of the identity of their company. The report would include a copy of the procedure used to collect the data and a final comparison of the operations and policies of the companies in the research.

#### Interview Guide

The interview guide (see Appendix B) consisted of three parts. The individual parts corresponded to the sections outlined in the structure of the case studies. The first part of the interview guide explored the problem of customer service failures. The second part concerned the set of reactions perceived as available to the respondent. The last part combined the third and fourth areas of the case studies. This part dealt with all matters that might affect the reaction decision.

The first part explored the nature and magnitude of the customer service failure problem. Questions in this part directly address the areas of stockouts, "short-ships," and order cycle failures. Finally, the existence of any other major type of service failure was explored.

The second part of the interview guide dealt with the reaction to service failures. The interview guide investigated both the short- and long-run reactions to



a service failure. The interview guide first collected the reactions the buyer perceived as available, the evoked set, and then investigated Walter's short-run reactions. Subsequently, the interview guide addressed the three types of long-run reactions (direct, indirect, and internal) suggested during the pretest.

The last part of the interview guide dealt with procedures within the organization. This part dealt with two areas: the internal managerial procedures within the company and the situational variables that might affect the reactions decision.

The first area, internal procedures, addressed the internal reporting system and the managerial procedures within the company. The existence, use, and frequency of any reporting procedures within the company was explored. The management procedure involved in the reaction decision was investigated with respect to the authority and inputs of other managerial levels within the organization.

The situational variables that the managers might consider were discussed next. The situational variables were divided into three areas: product attributes, supplier attributes, and competitive pressures. These areas described the buyer-seller situation in which the service failure occurred.

Lastly, the interview guide asked three questions which pertained to the channel relationships. These questions involved competitive pressures and their affect, the conditions that might prompt the buyer to carry additional safety stock, and the ability of the buyer to dictate service levels to suppliers.

In summary, the research process is comprised of the following steps:

1. Contact by mail;
2. Follow-up contact with a research proposal by mail and telephone;
3. Follow-up visits to senior management;
4. Interviews to collect data;
5. Data analysis;
6. Contact management with a preliminary report;
7. Add any suggestions made by management; and
8. Mail the final report to the Vice President for Merchandising and the executive responsible for purchasing.

## CHAPTER IV

### THE FINDINGS

The findings of the research are presented in this chapter. The chapter begins with a general summary of the results of the interview process. The body of the chapter consists of the case studies as were outlined in Chapter III in the section entitled, "Case Study Structure." The research questions as listed in Chapter I follow the case studies.

In all, 45 interviews were obtained from the six companies involved in the research. On the average seven or more interviews per company were obtained. The length of the interviews ranged from 40 minutes to six hours or more depending on the person being interviewed. Typically, the interviews ranged from two hours for the initial discussion of the project with senior management to an average of one and one-half hours for the buyers in the organizations.

In every case the management person being interviewed agreed that the level of service being offered by their suppliers was deteriorating. In three of the participating companies, management had begun a monitoring

system to keep themselves appraised of the problem on a continuing basis. In each company, management was anxious to find how other organizations handled the problem of customer service failures and indicated that they would be interested in any suggestions for improving the situation.

### Case Studies

The following six case studies follow the form outlined in Chapter III. After an initial brief description of the firms comes: (1) The frequency and severity of each type of service failure, (2) The available set of reactions perceived as open to the buying organization in both the long- and short-run, (3) The internal procedures within the buying organization for arriving at a reaction decision, and (4) The major variables which are included for consideration in the decision process.

#### Company A

Company A is a retail grocery chain in the upper midwest with more than 20 stores. Company A is an aggressive organization experiencing substantial growth. The organization is sophisticated in its management and has been quite innovative in adopting new techniques and equipment in its grocery operations.

Company A's buyers and upper management saw all three types of service failures as severe problems. In particular the problem of "short-ships" was discussed. Complicating "short-ships" is the lack of notification that usually accompanied the service failure. The communication problem even extended to the representative for the product. If the "short-ship" was severe, the lack of advanced warning virtually guaranteed warehouse stockouts and quite possibly, stockouts on the retail store shelf.

In the short-run, Company A's buyers saw only two possible reactions, to either try and open communications with the supplier and avert any future service failures while at the same time backordering, or, in some isolated situations there could be some substitution of one size of the supplier's product for another. The second reaction depended on sufficient advanced notice by the supplier that there was a problem.

In the long-run, the buyers saw several reactions they could use to bring pressure on their suppliers. The harshest reaction they could exhibit was to delist all or some part of the supplier's product line. Often, this could be some very marginal product which would be delisted in order to send a message to the supplier. In addition to delisting products, the buyers would refuse to participate in promotions sponsored by the supplier or refuse to adopt any new product offerings introduced by the supplier.

Company A was unique among retailers in one respect. They did not include the cutting of shelf space as a possible reaction to service failures. The management felt that the cutting of shelf-space would begin a destructive cycle for the product in question. Rather than follow through such a cycle, management felt that it was simpler to immediately delist the product rather than to endure the long-drawn-out destruction of its product which would end with delisting the product.

Once the decision was made to react in some way against a supplier, the buyer had the authority to carry out the decision. There was, however, an informal buying committee which reviewed the actions taken by the individual buyers. As an informal policy it was recognized that, in cases where the reaction was rather drastic, it was best to first obtain the consent of the buying committee before following through on the reaction decision.

Leading to the final choice of reactions to a service failure, several factors were considered. Among those factors were: product volume, manufacturer advertising and promotions, gross margin, availability of substitutes, and degree of brand loyalty for the product. Of these, the most important were volume, gross margin, and the supporting promotional mix of the supplier.

Product volume was very important to the buyer. However, the source of the volume had to be considered. Many products enjoyed a large volume because of the efforts of the retailer, while some other products have a large volume due to the support of the manufacturer. The products that have a large volume because of retailer efforts were those that have been featured in promotion, given large amounts of shelf space, and in general "pushed" by the retailer. If the volume was due to the retailer efforts, the buyers felt that they could take much stronger action than if the volume was generated by manufacturer's support.

Gross margins were also important to the buyer; if the gross margin was for a product with a high rate of inventory turnover, this would give even greater weight to this element. The gross margin was also connected with the promotional mix of the manufacturer. A promotional mix that included a high level of effective consumer advertising, a good promotional policy of well managed coupons and deals, and sufficient notice of any upcoming promotions would be a source of power for a manufacturer restricting the type of reactions that could be used against such a product.

Company B

Company B is a large wholesale grocery operation sponsoring a voluntary cooperative with multiple divisions in different geographic markets. The management of Company B saw all three types of service failures as problems. The most frequent, in their estimation were order cycle problems. The most severe from management's standpoint was the stockout, due to its disruptive effect on their own operations.

The management of Company B saw little ability to react to a service failure in any other form than to back-order. In the case of a product with a weak brand name and many ready substitutes, they would consider other more drastic forms of reaction. However, in the case where the product had a strong brand name, some degree of consumer loyalty, or few readily substitutable competitors, the management felt that there was no choice but to backorder.

The narrow choice of reactions was due to the competitive position in which management perceived themselves. For Company B there was fierce competition to sell to the more prominent independent grocers. If, at any time, one of these grocers felt any displeasure with the service offered by Company B, the retailer could easily switch to another wholesaler as a source of supply. Thus, the level of service offered by Company B had to be good,



not only in terms of availability and order cycle time, but also in terms of assortment.

Company B saw itself as having no option but to increase its own inventory levels when faced with poor service from a manufacturer. The increase of inventory was felt necessary to maintain the level of service offered to their customers. The most difficult situation for Company B was poor service on a product that was very popular with the retailers.

Internally, Company B was rather unique. The vice-president for merchandising had the sole responsibility for determining the company's reaction to a customer service failure. The vice-president also determined the level of service his company would offer in each division with respect to product availability, order cycle time, and product assortment. He currently was operating all the divisions of his company with identical product assortments and standards for availability and order cycle time.

#### Company C

Company C is also a large wholesaler sponsored voluntary co-op supplying independent retailers in the upper mid-west. Company C saw themselves in much the same light as did Company B. The most serious type of service failure was again the stockout, due to its disruptions of the ability to offer a high level of service to the customers.

While Company C was reluctant to take any form of serious reaction to a manufacturer's service failures, they were not as reluctant as Company B. Company C saw themselves as being in a position where they could not take any reaction against the strong products in a manufacturer's product line. However, if this manufacturer was offering them poor service, they could bring pressure to bear on the manufacturer by taking action against the weaker members of the manufacturer's product line.

The action taken against the weaker products could take the form of cutting the shelf-space of the products, not promoting these products, or entirely delisting the products. Equally, the manufacturer might find Company C unwilling to adopt any new product offerings that the manufacturer was introducing to the market. However, in the case of the strong products, Company C, much like Company B, could only turn to some form of internal adjustment in the short-run when the manufacturer offered poor service.

Company C did not centralize decision making to the degree that Company B did. In Company C, the buyers could suggest the form of reaction to a customer service failure. The reaction was, however, subject to the approval of the buying committee. The committee's approval was necessary for all reactions other than backorders, promotional decisions, and decisions not to adopt new product offerings.

When choosing reactions, chief among the considerations of Company C was the level of retailer support for a product. Products which have strong retailer support, whether because of consumer loyalty or other factors, were key in the marketing strategy of Company C. These products were afforded the highest levels of customer service by Company C. It was felt that retailer support was a cause of product volume.

#### Company D

Company D is a very aggressive retail grocery chain operating in a populous midwestern state. When the subject of customer service failures was considered, the buyers and management of Company D saw it as a constant problem. The problem of stockouts was confronted weekly; the larger the supplier, the worse the problem seemed. "Short-ships" were a constant problem. At the time of the interviews "short-ships" were running a little higher than normal. Order cycle time was a problem in certain categories of products; the products moving by rail were almost random in terms of delivery date.

Company D was very sensitive to order cycle problems. The problems were not only due to late delivery, but also early delivery. The management of Company D saw the delivery date of an order as part of a contract and expected that this date would be honored. Due to the size

of their unloading facilities, early shipments caused a good deal of congestion. The buyers for Company D expected their suppliers to notify them of the date their orders were shipped. This allowed the buyers to make their own plans based on the expected delivery time.

When considering reactions to service failures, Company D's buyers were instructed by management that the first thing they were to do was communicate with the supplier. The buyers were expected, as a matter of course, to maintain close contact with their suppliers. When a customer service failure occurred, the buyers were expected to contact the supplier and determine, as best they could, why the service failure had occurred.

The communication principle also helped the buyer within the company. After talking to the supplier, the buyer could alert the people in the retail stores if necessary, and have the stores take any appropriate action. In this way, the company hoped to avoid any serious internal problems that might arise as a result of a service failure.

Company D saw essentially the same set of reactions open to them as did Company A. In the short run, the backorder, or in some special case, substitution presented a viable course of action. In the long-run, however, there were the wider variety of reactions available. These consisted of direct actions such as cutting shelf-space,

refusing to promote, or finally, of delisting the product. In addition to the direct type of long-run reactions, there were the more indirect types of reactions. The indirect reactions consisted of taking action against the remainder of the manufacturer's product line in the same way the buyers might react directly against the product which had been involved in the service failure. To the extent a supplier wanted to do business with Company D, he could be forced to provide good service.

Internally, the buyer could act as a free agent in determining the type of reaction to take in response to a customer service failure. The only advice of upper management was again, communication. In an effort to maintain some consistent level of decision making, the buyers were expected to keep the upper managers informed of their actions. The emphasis on communications was also meant to help the buyer. If necessary, the top management of Company D was ready to contact their opposite number in the supplying organization to attempt to resolve the problem.

When considering reactions to a customer service failure, the three most influential variables were substitutability of the product, the sales velocity of the product (measured in inventory turnover), and the degree of consumer franchise that the product enjoyed in the market. The upshot was that "me too" products, those

with a high degree of substitutability and low consumer franchise, were easily dropped or "delisted." A product which scored high on all three of the measures would force the company to resort to indirect reactions in order to force a manufacturer to provide a good service.

#### Company E

Company E is a retailer-organized co-op in the upper midwest. Company E performs all wholesaling functions for over 200 retail outlets. Company E perceived itself as being in a position that would be somewhere between the retailers, Companies A and D; and the wholesalers, Companies B and C. While Company E was more sure of its relations with its retail outlets than either B or C, Company E could not be as secure as Companies A and D. The perceived level of security was reflected in the 98% service level Company E tried to maintain on all products to the retail store.

When viewing the different service failures, the buyers for Company E saw some things differently than the buyers in other companies. When asked about stockouts, these buyers felt that a complete stockout was seldom a surprise. Due to the size of the co-op and other factors, the buyers felt that a stockout should be anticipated when it does occur. "Short-ships" were another factor. Because of allocations, etc., the supplier can often "short-ship"

with little advanced notice. In the case of order-cycle problems, the buyers felt that, because of deteriorating service on the part of both rail and truck common carriers, the order cycle problem was becoming consistently worse. As a result, whenever possible, these buyers went with suppliers who would use contract carriers.

In considering reactions, these buyers felt that, whenever necessary, they would have to react to protect the company's reputation. If this involved carrying more inventory or making some form of internal adjustment, they would do so, but only as a last resort. If at all possible, the buyers would use some means of force to the supplier to offer better service.

In the short-run, time is a major consideration. What were the time requirements for the product in question? In some cases it was seen as advisable to order in advance in order to discover problems early. Ordering early was especially advisable in the case of seasonal items. In many short-run situations, communications were seen as the answer. The buyers attempted to find out what the problem was and backorder or substitute, if possible.

In the long-run, the usual list of direct and indirect types of reactions were seen as available by the buyers. The buyers seemed quite ready to "delist" a product, especially after two severe service failures. A

severe service failure was one in which the operations of the organization were drastically affected. Being out-of-stock on pumpkin pies the week before Thanksgiving was offered as an example of a serious out-of-stock at the retail level.

When deciding upon a reaction, there were five factors that were considered. First, how well is the product represented; "do these people do their best to serve us?" Second, how unique is the product? Are there a number of ready substitutes available? Third, is there a level of quality control on the product? Fourth, what is the profile of the consumer buying this product? The profile of consumer demand is concerned with the particular market segment at which this product is aimed and how that segment fits into the overall marketing strategy of the firm. Lastly, "what is the promotional policy of the manufacturer?" This question concerned whether or not the product was branded, whether the manufacturer did television advertising, what the level of advertising allowances were, and what type of coupons the manufacturer offered to support the product.

#### Company F

Company F is a major grocery retailing chain located in the urban center of a large and populous mid-western state. In viewing the customer service level



offered by their suppliers, the buyers for Company F saw the service problems in the following manner:

Stockouts. This was a chronic problem throughout the grocery industry. The primary cause of stockouts was allocations; conditions where the demand is simply outstripping the manufacturer's ability to supply. This type of failure has the most severe consequences for the buying organizations. However, manufacturers tended to give more notice on this type of problem.

"Short-Ships." "Short-ships" have the same cause as stockouts; however, a serious "short-ship" which approaches a stockout can be more damaging than a complete stockout. The problem is one of advanced notice. There is no warning in the case of a "short-ship," and this almost assures that the organization will stockout on the store shelf.

Order Cycle Problems. These have become a constant headache for both rail and truck. The average was 10 days for a rail shipment with it taking as long as 21 days. Trucks averaged 4 days, sometimes taking as long as 10 days. Less than truckload orders take longer than rail in most cases.

Promotions. Company F included the manner in which a supplier handles his promotions as part of his customer service. A chief concern was sufficient advanced notice.

A supplier should give a minimum of four weeks advanced notice on a promotion and have shipped the last of the promotional inventory by two to two-and-a-half weeks prior to the promotion.

When considering reactions to a service failure, Company F saw the same set of short- and long-run reactions open to them that the other retailers, Companies A and D, saw. One point did stand out. Company F refused to consider any situation in which they would carry more inventory or adjust at all their internal operations. They would delist the product or one of the other products of the manufacturer in an effort to force better service levels before they would carry additional inventory.

Internally, each buyer was free to handle his suppliers without any interferences. The company maintained a current record of service offered by all suppliers on all products. Two service failures during a month on any product would result in a supplier being put on a "hot sheet." Being placed on the "hot sheet" would lead to a meeting between the buyer and the salesman representing that company. If necessary, the salesman's supervisor would be asked to come along.

If the meeting did not have the desired effect, the company would begin to take other actions. As a preliminary, the products (or product) of the manufacturer

would have their shelf space cut. Another action would be to discontinue (delist) a marginal product. In this way, Company F would begin to pressure the offending supplier to improve the offered level of customer service.

When considering reactions, there are four primary factors which were taken into account. First was the product sales volume across all stores. Second was the gross margin on the product, coupled with the number of inventory turns achieved for the product. Third was the promotional activities of the supplier, including the type of promotions, and the "promotional velocity" of the product. The "promotional velocity" was a measure of the increase in sales on the products that accompany a promotion. Fourth was the degree of substitutability of the product.

### Research Questions

#### Research Question A

*What are the sets of short- and long-term reactions to customer service failures?*

The first research question dealt with the set of reactions to a service failure perceived as available by the buying organizations. The data are summarized in Figure 4-1. A review of the responses indicated that within the channel, few of the alternatives identified by Walter were perceived as being viable options. The only option in the short-run that all companies viewed as available

QUESTION: Do you perceive these responses as open to you when you encounter a customer service failure?						
	Company A	Company B	Company C	Company D	Company E	Company F
Backorder	Yes	Yes	Yes	Yes, in certain circumstances	Yes	Yes
Substitute a different size of the same product.	For some products where the manufacturer has that option.	If possible	No	If given enough advanced notice of the problem.	If possible.	Where the manufacturer can provide sufficient notice and there are no interfering promotions planned.
Substitute different products with respect to size, price, and quality.	Not possible	Only in the case of their private label.	Yes	In cases where lead times permit and there is sufficient advanced notice of the problem.	If possible	Same as E
Change sources of supply for the original product sought.	Seldom possible, only occurred once in their history.	Not possible, due to the fact that they deal directly with the manager, the sole source.	Not possible	In the case of private label products, this may be possible on a long-run basis.	Same as D	Occasionally, for private label products with some packers.
Are there any other immediate reactions available in response to service failure?	None	None	None	None	None	None
QUESTION: Are there any longer-run reactions available to a service failure on to a supplier's level of customer service?						
Delist the product from the list of products carried?	Used, but only in an extreme case where a supplier refused to cooperate.	Possible, but never used.	Seldom used.	Has been used on a variety of products ranging from national brands to local labels.	Used but only with extreme provocation.	Used on occasion when necessary.
Cut shelf space for the product in question.	Never used. Would sooner delist the product. View this as the beginning of a slow death for the product.	Not applicable.	Not applicable.	Used as a ploy to emphasize their displeasure of a manufacturer; used often against other items in the product line.	Not applicable.	Used to bring pressure on suppliers to improve their service.
Allocate different shelf space to the product as a penalty.	Commonly used.	Not applicable.	Not applicable.	Only used upon occasion. Unsure of the effectiveness of this ploy.	Not applicable.	Used often in conjunction with a cut in shelf space.

Figure 4-1. Reactions to Customer Service Failures Perceived Available by Grocery Companies.

	Company A	Company B	Company C	Company D	Company E	Company F
Refuse to cooperate with promotional activities of the manufacturer.	Often used. This is viewed as an extremely effective lever to encourage a supplier to improve his level of customer service.	Same as A	Same as A	Same as A	Same as A	Same as A
Not accept new product offerings being introduced to the market by the manufacturer.	Perhaps the most effective pressure that can be brought against a manufacturer to improve his level of customer service.	Used in some cases, but seldom in the case of a national brand.	Hard to use in the face of a manufacturer who uses a great deal of advertising to create consumer demand.	Extremely effective. Can be modified to cover a situation where only certain sizes or flavors are accepted.	Very effective when used, but the competitive situation must be considered.	Extremely effective on all types of manufacturers.
Will you carry additional inventory in response to poor customer service by a supplier?	No. Would force the supplier to improve service or would delist the product.	Reluctantly.	On only a small range of products that are felt to be vital to the stores supplied by C.	Virtually never.	Seldom, if ever. Will use some means to force the manufacturer to improve service.	No. Would use force.
Would you attempt to improve communications with the supplying company in an effort to improve customer service?	Yes, this is usually a first step before any other actions are taken.	Same as A	Same as A	Yes. This is so with both the manufacturer and the transportation mode being used. This may also involve contact between top management of the two companies.	This is usually a first step before other reaction. This may be a difficult task as many manufacturers are organization bound which hinders communication.	Yes, this may even involve meetings between higher management at the two companies.
Would you adjust your ordering methods by either adjusting your order point, period, or quantity.	No	In some cases where the product was strongly desired by consumers.	In a few cases.	No. Instead a small sign would be put in any empty shelf space informing the consumer that the problem was the result of actions by the manufacturer.	No	No
Are there other longer-range reactions that you perceive as available to you?	In some cases actions may be taken against the weaker parts of the manufacturer's product. This might involve an early delisting of the product or other actions such as those listed above.	None	None	Same as A	Same as A	Same as A

Figure 4-1--Continued

was the backorder. In some cases where a stockout or "short-ship" was involved, and there was good communication in the channel, the possibility of substitution of another size of the same product was present.

In the case of the longer-run reactions, all but one company viewed the set of options offered by Walter (see Figure 2-2) as open to them. These five companies were unanimous in that they would never be willing "under any circumstances" to make internal adjustments in response to their suppliers' actions. The most common comment heard was, "Nobody tells me how to run my business."

The exception in these cases was a wholesaler sponsored voluntary cooperative. The wholesaler felt that they had to carry a wide selection of products with nearly perfect availability in order to retain the retailers who currently participated in the co-op. Therefore, because of the competitive position in which they perceived themselves as being vulnerable, the wholesaler could not afford to offer poor service to their customers. The wholesaler felt forced to make internal adjustments, such as carrying more inventory, as in the case of a product which the retailers deemed important and for which the manufacturer provided inadequate service.

Research Question B

*What effect does the supplier's marketing mix have on the reaction decisions?*

The second question was concerned with the problem of the affect of the remainder of the supplier's marketing mix on the reaction decision. Included in this area is the impact on the reaction of the promotional policy and the remainder of the manufacturer's product line. A review of the responses indicates that the affect of the manufacturer's promotional activities on the reaction decision could be quite important. However, the impact of the strength of the remainder manufacturer's product line varied in importance among the responding companies.

The question of the effect of the remainder of the manufacturer's product line produced answers that varied with the assumed power of the responding organizations in the study. The very powerful channel members felt that the remainder of the manufacturer's product line had no affect on the reactions to a service failure. On the other hand, the less powerful channel members felt that some manufacturers with a secure source of power resulting from a strong, well differentiated product(s), would use this power to punish a wholesaler or retailer who took action against some portion of the manufacturer's product line as a reaction to customer service failures.

QUESTION: What effect does the manufacturer's promotional policy have on your reaction decision?						
	Company A	Company B	Company C	Company D	Company E	Company F
Deals featuring a discount on the product.	A well managed promotion policy can build volume for the product, but only if we cooperate by accepting the product.	Always help a product or manufacturer.	Same as B	To the extent that a product is strong end.	Same as B	Same as A
Consumer advertising for the product in question.	A product which can build a strong consumer franchise will definitely force a different type of reaction than would normally be considered.	A paramount importance when considering any product under any circumstances.	May be the prime concern for many products and manufacturers. Will definitely alter decisions.	Same as A.	A serious concern. A product that is supported by heavy consumer advertising can force its way onto the shelf. No such product could be delivered.	Must be considered, because of competition pressures. Some products must be on the shelf.
Consumer advertising for the remainder of the manufacturer's product line.	Does not affect the decision significantly. Only in the case where the product has a strong brand name would this be important.	Of importance if one of the remaining products is important. This must be considered along with the manufacturer's actions.	Same as B	Should be inconsequential in the decision.	Is a consideration if the products have a strong common brand name.	To the extent that the brand name establishes the products in question as a strong product. This could be an important factor.
QUESTION: What is the effect of volume on reaction decisions?						
Volume	A determination must be made as to whether the volume is a result of manufacturer decision or a result of our actions.	Like consumer advertising, this is also very important.	Volume is the prime measure of the importance of a product to our organization.	None--all products must perform to our requirements.	If the product's volume is a result of manufacturer support, this must be considered and will probably alter our decisions.	Some, but cannot be considered in and of itself.

Figure 4-2. Effect of the Supplier's Marketing Mix on the Reaction Decision.



QUESTION: What is the effect of brand loyalty on reaction decisions?					
	Company A	Company B	Company C	Company D	Company E
	Like consumer advertising this must be taken into consideration and reactions must be altered accordingly.	Brand loyalty precludes any substitutions and would put the manufacturer in a strong position which might eliminate any ability to react.	Same as A	Obviously a product with strong brand loyalty will call for a different reaction than will other products. You can't take strong action against some products.	Same as A
					Same as D
QUESTION: What effect does gross margin have on the reaction decision?					
	Gross margin in and of itself has very little importance. Volume and inventory turns must be considered if all else were equal. A product with a higher gross margin would modulate any decision.	Same as A	Same as A	Same as A	Same as A
					Gross margin insofar as it is a key to profit margin on this product would be an important consideration.

Figure 4-2--Continued

### Research Question C

*What is the impact of the product's competitive situation on the reaction decision?*

The third research question was concerned with the impact of the product's competitive situation. The question was concerned with the affect that readily substitutable products have on the reaction decision. As previously stated, a well-differentiated product with a strong consumer franchise is a very valid source of power for a manufacturer. The degree to which a product has readily available substitutes represents an inverse measure of the power that a well-differentiated product has. Thus, the availability of ready substitutes weakens the position of the manufacturer and perhaps alters the reaction decision.

For this question there was seeming unanimity among the respondents. Almost all the people interviewed saw the availability of ready substitutes as the inverse of a well-differentiated product. Such a product was referred to as a "me too" product; few customer service failures would be tolerated from such a product before action was taken. Quite often these actions would have been of a very severe nature. In the case of "me too" products, the responses varied little across the six companies responding (see Figure 4-3).

QUESTION: What effect does the availability of substitutes have on your reaction decision?						
	Company A	Company B	Company C	Company D	Company E	Company E
Competitive substitutes?	If there are substitutes available, either ones that we carry or ones that we can adopt, then the reaction decision is made much more difficult.	The product can have many competitive substitutes, but if it is popular with our retailers, then our decisions would be heavily affected.	Same as B	If there were substitutes available for such a product, then we would tolerate for less in terms of bad service.	The more profit the substitute, then the easier it is for us.	Competitors' substitutes make our jobs easier as there would be more products competing for limited shelf space.
If the product is a "me too" product?	If the product is a "me too" product and doesn't provide good service or have a strong brand name, then we would delist it in a second.	Severely lessens the product's position.	Same as A	Same as A	Same as A	Same as A
If the product were well differentiated with few substitutes?	Such a product would be very difficult to act against. In this case action would probably be taken against some portion of the remainder of the product line of the supplier.	Such a product would probably level us to alter our own operations.	Same as B	In this case we might eliminate some other product in the supplier's line or refuse to adopt new product offerings of the manufacturer.	In this case we would use more indirect forms of action against the manufacturer.	Same as D

Figure 4-3. Effect of the Competitive Position of the Product on the Reaction Decision.

Of considerable interest are the responses to the question of preproducts which are well differentiated with a strong consumer franchise. In the case of the wholesalers, such a product would be quite formidable; in two cases, buying companies altered their own inventory rather than take action. This was not the case, however, for the chain operations.

The chain operations indicated that, while the product itself might be quite strong, they would find other means to force the manufacturer to improve the level of customer service he offered. These other methods would include cutting the shelf space of, or entirely eliminating, a minor product of the supplier. The buyers indicated that pressure would also be brought on a supplier by being more hesitant to adopt new product offerings of the supplier. Thus, the buyers would retaliate against a manufacturer offering poor service on a well-differentiated product by taking action against other parts of the manufacturer's product line or against new product offerings (see Appendix C).

#### Research Question D

*What is the effect of previous levels of service and time elapsed since the most recent service failure?*

Across the companies there was wide variation in the impact of previous service on the reaction decision.

Consistent with this was the disparity in record keeping with respect to prior service levels. Thus, the effect of prior service levels as suggested by the literature (21:444) was not entirely apparent in the sample of companies interviewed.

Some buying organizations kept detailed records on the levels of service provided by their suppliers and periodically reviewed these records as part of a supplier evaluation. Thus, the prior levels of service, both bad and good, was included in decisions pertaining to a manufacturer. A service failure by a manufacturer with a past history of poor service would produce a different response than would the same type of service failure from a firm with a good service history.

In contrast to the firm which maintains a continuous record of supplier performance was the firm in which the only record of manufacturer's performance kept was the memory of the individual buyer who deals with the firm in question. In this case, the perception of the level of service offered by the supplying firms was a subjective one depending upon the severity of the failures and time elapsed since the failure, rather than the overall record of the firm. Thus, the more severe the service failure the poorer the level of service was perceived to be and the longer the perception held.

In both cases the impact of the past service history of the supplier was significant, but the impact on the reaction decision differed from company to company (see Figure 4-4). In the companies which maintained active records of the service provided by a manufacturer, the overall level of service as it is recorded, as well as the severity of the failures as perceived by the buyer, were included in the reaction decision. In the case where the only record of past service history of a supplier was that perceived by the buyer, only the most severe and most recent service failures were included in any decision affecting the supplier or his products.

#### Research Question E

*What is the effect of internal management policies on the reaction decision?*

The fifth research question was concerned with the extent to which internal policies, information flows, and authority affect the reaction decision following a customer service failure. Across the companies there was a wide range of response to these questions indicating that there was no standard method or procedure for making the decision (see Figure 4-5). These results did not seem to fit any pattern with respect to the other research questions.

The first area of concern was the availability of information to the decision makers. The variation in the

QUESTION: What effect does the prior service level of the supplier have on the reaction decision?						
	Company A	Company B	Company C	Company D	Company E	Company F
The number of previous service failures as a determinant of your reaction?	Only a minor influence. Mostly we are concerned with the immediate decisions and own impression of the supplier's handling of this stockout situation. Only if the supplier had several recent stockouts would this be a concern.	Very little, if a supplier's level of problem, we will request a meeting with the salesman and his supervisor.	Some, if a supplier becomes unbearable we will take some form of action against them.	We closely monitor the level of service offered by each of our suppliers. We tell the salesmen this and let them know that to some extent their success depends on a good customer service record. A supplier with a poor record will face a loss of shelf-space or of promotions, and know why too!	We are currently in the process of implementing a continuous record of the customer service performance of our suppliers. In the past we have left this up to our buyers.	We take this area very seriously; our suppliers had better also. A supplier who has a poor overall record will be told he had better shape up.
How does the severity of previous service levels affect your decision?	You tend to remember severe service failures more than just the day in and day out. So I guess these failures would cause us to take more drastic actions.	Some, but no more than the number of service failures.	This would cause more of a reaction than the number of service failures. Many failures as defined are too small to worry about. The ones that cause a severe reaction are the really bad service failures where you are hurt.	This is added in with the number of service failures. So that an overall service level and the degree of severity of the service failures will be used in selecting the actions to be taken with a supplier.	This was our main measure of service in the past, but we are changing this.	Same as D
Does the time elapsed since the last service failure affect your decision?	If a supplier had two service failures in a relatively short period of time, there would be a great deal of question about our relationship with this supplier. We would have to find out if he was changing his policies toward us.	Not to any great extent.	We would meet with the salesman to determine whether this meant a new policy or method of operation for the supplier.	Very little. We would look at his overall record and previous reputation. A series of service failures would cause us to examine the supplier's operations for any changes.	Would depend on the severity of the service failures. Some we would let go by; if they were severe, however, we would have to call a meeting with the salesman and his supervisor.	Some suppliers would require that we examine their operations because of their past service. Other suppliers we would simply watch a little more closely.

Figure 4-4. Effect of Past Levels of Customer Service on the Reaction Decision.

	Company A	Company B	Company C	Company D	Company E	Company F
What is the effect of supplier reputation on your reaction decision?	This would affect our decisions about when we would react against our supplier. The better the reputation, the more likely we will be to hold off any reaction for a given service failure.	The better a supplier's reputation the more likely that his promotions of new products would be accepted as opposed to a supplier who has a bad reputation for service.	Same as B	Reputation is an overused term. We would rely more on our records of the supplier's past performance and the degree of severity of these failures.	Same as B	A supplier's reputation is a very fragile thing. It depends on the last few transactions. If a supplier has been doing well in his past few transactions, then he will to some extent receive some benefit of the doubt.
How does the management of previous promotions affect your decision process?	Promotions are a key element of a supplier's service. A product can be over promoted as well as under promoted. This would be important in our adoption of new products.	This would be an important element in the planning of our advertisements and other promotional material. The prime element is time. We must have enough advanced warning.	Same as B	This is an element that we would consider but the service levels offered by the supplier and his past service history would be the most important factors.	This is an element that has not been considered in the past. The only complaint we might have would be where we were not given sufficient advanced warning of a promotion.	We are always watching for suppliers who do a good job of managing their promotions with respect to timing and coupons.

Figure 4-4--Continued



QUESTION: How often are reports of service failures made?						
	Company A	Company B	Company C	Company D	Company E	Company F
Frequency	Daily	Daily	Daily	Daily	Daily	Daily
Who receives these reports?	All buyers and merchandising management.	All upper merchandising management.	Same as A	Same as A	Same as A	Same as A
Is this a continuous record kept to monitor supplier service performance?	No	No	No	No	We are in the process of establishing such a report.	Yes
QUESTION: Once a service failure occurs, what type of approval must be obtained before you can react?						
	A buyer may take any action that he sees as necessary, but he will get the support of the management if he is smart.	Only the vice president for grocery merchandising may take any action against a supplier.	The buyer must obtain the approval of the head buyer and the buying committee before he can take any serious actions against a supplier.	The only requirement is that the buyer determines why the service failure occurred by talking with the supplier. If the buyer takes some action, he is required to keep upper management informed.	The buyer is in charge of all relations with the supplier. If the customers begin to complain, then he may have to defend his actions to higher management.	Same as E
QUESTION: Is there a formal or informal policy on reactions to service failure?						
	Only in the case of seasonal products. If a supplier fails us once, we likely will not use him again.	See above answer.	Same as A	Same as A	Same as A	Same as A

Figure 4-5. Effect of Internal Management Policies on the Reaction Decision.

amount and quality of data available for decision making was reflected in the responses to the preceding research question. Of the six firms, two maintained current, on-going records of the levels of customer service provided by the suppliers. One company was in the process of implementing such a system and the remaining three firms maintained no formal record of the supplier's service failures.

All the companies in the survey did maintain a report on current orders which was received daily by the buyers. This report indicated all the orders that were late as of the present date and all outstanding orders that would be overdue as of the next day. In three of the companies this report included the current inventory status for the product in question and the number of days of inventory remaining until the warehouse would be out-of-stock. In only two of the companies was this retained and included in a measurement of supplier performance.

Once a service failure was encountered there was some degree of variance as to which manager within the company determined the reaction, and what approval the decision maker had to seek in order to implement the specific reaction. The findings ranged from the extreme in one organization where the vice-president of merchandising made all decisions regarding reactions to service

failures, to two of the other organizations where the buyer had the sole responsibility of handling the relations with the individual suppliers.

In the remaining three organizations the individual buyers determined what reaction the organization should exhibit, subject to the approval of some more senior element of the management. Management control could vary with the nature of the reaction exhibited. Minor, or very inconsequential reactions often required no approval from higher authority. However, as the reaction became more serious the more it was necessary to obtain approval from higher authority. Approval would be necessary in the case of an attempt to delist the product, for example. One point of interest was that when considering the adoption of a new product or promotional offering, the buyer could act on his own volition.

Only two of the companies had any observable policies, formal or otherwise, on handling reactions to service failures. One case was Company B, where the reaction decision was always deferred to the vice-president of merchandising. The second was in Company D, where the head buyer required that all buyers maintain close communications with their suppliers. Communication required was an effort to determine why the service failure had occurred before reacting. The policy of communication

was also implemented to make sure their organization kept close contact with suppliers in an effort to prevent any subsequent service failures.

In the case of seasonal products, there did seem to be some unanimity of policy across all firms. Due to both the short duration of demand and high perceived of a retail stock-out for seasonal products, only suppliers with good past service records were used. After a serious customer service failure on a seasonal product, it was felt that the supplier would not be used again for the product in question (see Appendix D).

#### Research Question F

*What is the effect of channel variables on the reaction decision?*

Such a question requires some degree of evaluation with respect to the responses to the five preceding research questions. In order to evaluate the effect of channel power, conflict, or communication on the reaction decision, a great deal of interpretation is required. Because of this, much of the discussion of the affect of channel variables on the reaction decision will be left to Chapter V and the section on Interpretation of the Findings and Research Questions.

In this section, three questions will be examined. The first is whether or not the buyer believes that

consumers will change their shopping location because of out-of-stocks. Second, whether there are any competitive conditions which might force the buyer to carry more inventory. Third, did the buyer perceive his company as being in a position which would allow him to dictate to his supplier what level of customer service they must provide?

For the first question, there was some degree of unanimity (see Figure 4-6). All the respondents started by saying that the consumer was the final judge of their efforts. Some respondents did, however, admit that, of the total number of items they carried on the store shelf, there were only one hundred items at best that they felt they "had to have on the shelf at all costs." These items invariably were those with strong brand name, high volume, and a well differentiated and loyal target market. It was felt that out-of-stocks on these items would cause customers to shift outlets.

In response to the second question, there was some divergence of opinions. Two of the companies felt that there were some conditions that might cause them to carry more inventory. The other four companies all stated that they could not conceive of any conditions that would cause them to carry additional inventory.

QUESTION: Do you feel that consumers will change stores due to out-of-stock?					
Company A	Company B	Company C	Company D	Company E	Company F
Of the 14,000 items stocked there are maybe 100 that have to be there. A service failure (stock-out) on one of these products could well cause our customers to leave.	Yes, the customer is the final judge of all our actions.	Same as B	No. One stockout alone will not cause our customers to leave. The various services offered in our stores and the level of store advertising done has created a high level of store loyalty that we feel will offset some of the product loyalty.	Same as B	Same as A
QUESTION: Are there any market conditions which might cause you to carry higher levels of inventory?					
None	Under some conditions where a manufacturer was well liked by our customers, we might carry additional inventory to protect the interests of our customers.	For some manufacturers, yes. These would be the manufacturers who had a strong position with our customers.	Not if we were being forced to by a supplier. However, if a manufacturer were going to force some problems and came to us as a favor with a way to protect ourselves, then we might carry some higher inventories.	Same as D	None
QUESTION: Do you perceive yourself as being able to dictate to your suppliers what level of customer service they have to provide?					
When all is said and done, yes.	No, you can never dictate to anybody. It is a process of negotiation and mutual interest. If a supplier offers me had service, they only hurt themselves.	To some suppliers, but many suppliers are too popular with our customers for us to dictate to.	Yes	For the most part, yes.	Same as E

Figure 4-6. Effect of Channel Influences on the Reaction Decision.

The response to the last question followed the pattern of the above responses. The four companies that said they would not carry more inventory under any circumstances also felt that they were in a position to dictate terms to their suppliers. The other two companies tended to qualify their responses to their question.

## CHAPTER V

### CONCLUSIONS

#### Organization

The final chapter is divided into five sections: Integration of Findings and Research Questions, Service Failure Costs, Recommendations, A Generalized Model to Reaction to Service Failures, and a Summation. The first section is a discussion of the findings for each research question, including a more detailed treatment of the last research question, and an interpretation of the information given in Chapter IV.

The second section is a discussion of the potential costs associated with the short-run and long-run reactions to service failures a buyer might exhibit. The third section includes recommendations for buyers and sellers of grocery products, and looks at methods which will allow buying organizations to better develop their reactions to service failures. In addition, recommendations are listed that will help grocery manufacturers better understand the potential costs of service failures.

The fourth section is a generalized model of the reaction process and represents the outcome of the research



questions and the case studies, and is intended to explain the basic process of reaction to a service failure as observed in the six case studies. As such, the model represents the major contributions of the research. Hopefully, the model will serve as a departure point for further research to service failures. The chapter closes with the recommendations for future research.

### Integration of Findings and Research Questions

#### Research Question A

#### The Set of Long-Run and Short-Run Reactions

The responses to the first research questions, the set of reactions perceived by the grocery buyers, can be divided into two subsets. First is the relatively narrow selection of short-run reactions available. These reactions are short-run in that they are specific to an individual service failure. Second is the more long-run set of reactions which differ from the short-run in that the reactions are in response to the supplier's overall service level, instead of a specific service failure. The long-run reactions can be subdivided into three categories: direct, indirect, and internal reactions.

### Short-Run Reactions

The short-run reactions as defined by almost all the respondents consisted of two choices. The first, and by far the most common reaction was to backorder, which is simply delaying the purchase until the product is available. The backorder corresponds to a consumer's decision to delay purchase until the product was available.

The second choice is to substitute. Substitution reaction involved accepting another size of the same product. Substitution for grocery buyers is less frequent due to the time required for notification of product non-availability and for a new order to be placed. Buyers in the manufacturer-wholesaler setting did not see the options of switching to another source, or substituting another brand, as being available in the short-run. Only one buyer could tell of an instance where an alternative source for a product was available. The reason is that, in almost every instance, the companies participating in the research perform the wholesaling function and deal directly with the manufacturer. There is no other potential source for the specific product.

Switching to another product was not a short-run option. If a manufacturer had a service failure that resulted in a stockout on the retail store shelf, that empty shelf space would be filled with another product,

a de facto form of switching brands. However, the act of substituting brands occurred in the wholesaler-retailer situation which is outside of the area of the research. In the manufacturer-wholesaler environment, the switching of brands and sizes is a very complex decision which will involve the delisting of a product and the adoption of a new product. Therefore, substitution of brands belongs under the heading of long-run reactions.

The contrast between the short-run reactions available in the consumer purchase situation and buying situations within the channel should be noted. Walter identified six available options for consumers: postponing purchase, substitution of different size of the same brand, three forms of substitution of other brands, and switching vendors. During purchase decisions within the channel, only postponement (backorders) and substitution of another size of the same product are perceived as being available.

#### Long-Run Reactions

The long-run reactions can be either of a direct, indirect, or internal nature. The long-run type of reactions are not in response to an individual service failure, rather they are in response to the overall level of service being offered by the manufacturer over time.

The direct type of long-run reaction is taken against the product(s) which is the source of the service

failure. The direct set of reactions most often consists of cutting shelf space, relocating the product's shelf space, refusing to promote the product, or delisting (discontinuing) the product. Of these reactions, most buyers considered cutting or relocating the product's shelf space as a "message," indicating that the buyer was dissatisfied with the level of service being offered. The message also implies that more drastic action could follow.

Refusing to promote a product and delisting the product are more serious reactions and will usually only take place after the "message" types of reactions have occurred. To cut promotions on a volume product or to eliminate that product itself is seen as an action that does harm to the buying organization as well as to the manufacturer. However, the buyers felt that a situation in which a consumer repeatedly does not find a product that normally is stocked causes more loss to consumer goodwill than the nonpromotion or elimination of the offending product.

Cutting of promotions or discontinuing a product which has a strong consumer franchise could cause an unacceptable loss of consumer goodwill. Such a powerful product would force the buyer to resort to indirect reactions.

Indirect actions are taken against products in manufacturer's line other than the one(s) causing service problems. Indirect actions are the same form as direct actions with one exception, nonadoption of new product offerings. Essentially the buyer, when using indirect reactions, is holding the remainder of a manufacturer's product line hostage for continued acceptable customer service on the manufacturer's strong products. If the remainder of the manufacturer's product line represents a significant proportion of the sales or profits of the manufacturing organization, the manufacturer could be said to have a large motivational investment in the success of these products. One method of reducing the power imbalance created by the manufacturer's possession of a well-differentiated product with a strong consumer franchise is to increase the manufacturer's motivational investment in the remainder of his product line, and then withhold the support necessary for the success of these products. (See Appendix C for a further discussion of countervailing power.)

Thus, to the extent that the manufacturer is interested in the success of the remainder of his product line, a buyer may bring pressure to bear on the manufacturer to provide good service on products (with a large volume and strong brand loyalty) by taking action against the remainder of the manufacturer's product line.

Indirect reactions are the same as direct reactions with one exception. The buyer may also put pressure on the manufacturer by withholding support for the manufacturer's new product offerings, simply refusing to adopt any new products offered by the manufacturer. The buyer, when taking action against new product offerings, might partially adopt a new offering by taking some of the product variations (package sizes or flavors, for example) or refuse the product entirely. Such a reaction might have consequences for the buying organization. If the product is successful, the organization, by not adopting, may suffer. However, in the case of most new product offerings, the manufacturer would be far more adversely affected.

The internal reactions center around increased levels of inventory and communication. The increase in inventory can be a result of larger safety stocks, longer order periods, or altered order points. The net effect of any of these internal reactions is an increase in inventory levels and, as a consequence, an increase in inventory carrying costs.

The most important result of the increase in inventory levels is a decline in the rate of inventory turnover. In the grocery industry, where the average profit margin on sales is approximately 1 percent, the rate of inventory turnover is critical. In four of the

six companies the buyers indicated that there was no measure a manufacturer could take to force the buyers to increase inventory levels.

The only type of internal reaction that was considered by buyers was to improve communications within the channel. One company had a formalized policy of communication with their suppliers. The other companies all talked to some degree about attempts to improve communications with a supplier once a problem had developed.

#### Research Question B

##### Effect of the Manufacturer's Marketing Mix

The second research question is concerned with the impact of various areas of the manufacturer's marketing mix on the buyer's reaction decision. The primary effect of the manufacturer's marketing mix is on the buyer's decision whether or not to use direct, indirect, or internal types of reactions. The manufacturer with a strong product(s), one with a recognized brand name and good consumer advertising, would most likely face indirect reactions to service failures. A weak product, on the other hand, invites direct reactions. A manufacturer with no weak products would be in a position to force the buying organization to react internally, either by carrying more safety stock or by altering ordering policies. Most buyers stated that they considered

the following marketing mix variables: volume, uniqueness, promotional support, consumer advertising, and gross margin.

No product can be considered in and of itself. All variables are evaluated as a part of a set of variables that is being considered. As stated in Chapter IV, volume can be created by the manufacturer through its support of the product, or it can be created by the buying organization through featuring the product in promotions and shelf space. Volume in and of itself is not considered by buyers, but, like all the other variables, must be viewed as a part of the set of variables being considered. Volume by itself may not be significant.

Volume coupled with uniqueness is, however, significant. Uniqueness is the degree to which a product is differentiated from its competition. A well-differentiated product is one being perceived by the buyer and consumers as unique.

Product promotional support is concerned primarily with the offering of coupons and price deals. A good promotional policy is a strong asset to a product. However, a product can be "over promoted." The continuous offering of price deals or coupons without respite is felt to confuse the consumers. Thus, a policy of continuous promotion would be counterproductive to the manufacturer.



When considering consumer advertising, the buyer looks at the media advertising done by a manufacturer and any advertising allowances offered. A product with a large volume supported by manufacturer-sponsored consumer advertising would be perceived as having a strong consumer franchise, and therefore unique. Such a product, if supported by inadequate levels of customer service, would most likely result in some form of indirect reaction. The offering of advertising allowances was seen as a very positive form of support for a product. If the product was already a volume product, this would make the support even more effective.

The combination, good promotional support, volume, uniqueness, consumer advertising, and gross margin, would be very powerful support for a product. A product rated high on all of these variables would cause either indirect or internal reactions.

#### Research Question C

##### Impact of the Product's Competitive Position

The third research question concerns the uniqueness of a product, uniqueness being the lack of ready substitutes in the market. Wholesale buyers are extremely concerned with uniqueness when considering reaction decisions. In essence, the question is one of substitutability of the

product. This can be a function of product form differentiation or psychological differentiation through the use of consumer advertising.

A product perceived by the buyer as having many competitive substitutes that consumers are equally willing to purchase is a likely target for direct action. The more the product tends toward becoming a commodity, the less tolerant the buyer will be of poor customer service. A "me too" product, which is in a category with many other substitutes, some of which have some degree of consumer franchise, would be a candidate for immediate delisting because of poor customer service. A "me too" product would make a convenient product through which to take indirect action rather than take any action against a unique product.

The role that the buyers' perceptions play in determining the uniqueness of the product is of particular interest. The buyers' perception of how the consumers view the product is of concern, not the consumers' actual attitude toward the product. Thus, product representation, through salesmen or media, plays a key role in this situation. If the manufacturer's representative, or product advertising can convince the buyer that the product is considered unique by consumers, then regardless of the consumer's actual perceptions of the product, the buyer will act according to his image of the product.

## Research Question D

Effect of Prior Service Levels

The effect of prior service levels was postulated by Chang in his dissertation and subsequent publications (21, 22). Chang hypothesized that a "cognitive period" existed which followed a customer service failure. During this cognitive period, if a subsequent service failure occurred, the probability of some form of severe reaction on the part of the buyer would be much higher than normal (see Figure 2-1). Thus, the effect of the manufacturer's prior service history and time elapsed since the last service failure is of great importance.

In the responses given by the buyers, it was evident that the different levels of previous service offered produced different effects. The original concept offered by Chang did not specify the manner by which the buyer kept record of the prior customer service failures. Two methods of record keeping were used by the organizations in this study, four companies left the record of prior service to the memory of their buyers. One of the four companies, however, was switching to a continuous computer record of all service failures by product, by manufacturer. A continuous record was already kept by the other two companies.

Where the buyer had to rely on memory to evaluate the prior service level offered, whether the actual level of customer service, or the perceived record of customer service was used as the basis for reaction is important. The difference is in the ability of the buyer to recall all the customer service failures by a particular manufacturer versus the recollection of only those service failures which were not severe enough to be memorable. The perception of the manufacturer's record may not, in fact, be the actual levels of customer service offered.

In situations where a buyer relies on memory to evaluate the past performance of a manufacturer, the buyer is seemingly reacting to the severity of past failures. A firm which offers inferior service, but never has a severe failure, may mistakenly be perceived as offering good service. By reacting only to those service failures which, by virtue of their severity makes them memorable, the buyer may be reacting to a skewed version of the service level offered by the manufacturer.

However, in defense of buyer perceptions, there may be some problems with a computerized record. The computer record currently maintained does not account for the severity of the service failures due to the orientation toward a number of failures, as opposed to severity. Thus, as the records were maintained by

companies in this research, the computer record must also be aided by the buyer's memory or some other system which will input the qualitative aspect of service failure. Only by combining the quantitative record maintained by the computer and qualitative inputs from another source, could the overall service level offered by a supplier be properly evaluated.

The difference in the two methods of measuring the previous levels of customer service becomes more significant when the role played by the past service history of the supplier is examined. When a service failure is encountered, it is evaluated in light of the past service provided for the product itself and the overall service offered on the manufacturer's entire product line. Once the short-run reaction has taken place, whether or not any long-run reaction will occur, and what that reaction will be, is determined in large part by the past service record of the manufacturer.

For a manufacturer, the response to a given level of service across a sample of buying organizations may vary due to the different ways in which the past service is recorded. If the manufacturer has no "memorable" service failures, the past levels of service may well be perceived as good, even though there may have been many lesser service failures. However,

a manufacturer which has experienced a severe service failure may be perceived as offering a high level of customer service when the entire record is examined. For this reason, the method in which the buying organizations record the level of service is important.

The buyer who relies on memory alone will more closely approximate the function hypothesized by Chang. The function illustrated in Figure 2-1 emphasizes the effect of time on memory, as time elapses following a service failure, the impact of the service failure fades from memory. If the service failure was not severe, or in other ways memorable, in a short period of time the failure will have no impact on the buyer's reaction to a new service failure. In the two companies that were using a computer record of manufacturer service failures, the reactions were keyed upon the overall record of the manufacturer. A manufacturer with a poor record could expect a severe form of reaction.

#### Research Question E

##### Management Style Effects

When viewing the overall range of management styles, it was apparent that a great diversity existed. Whether or not this diversity translated into a difference in reactions to service failures was unclear. There

appeared to be little difference in the types of reactions exhibited by companies with a buying committee versus those companies which had no buying committee to pass on the long-run reactions.

However, such an observation does not consider the frequency with which the various direct and indirect reactions were used. From the interviews with buyers, there was some indication that the companies with buying committees which must pass on reactions were somewhat more conservative in their responses than the companies which allowed buyers to act freely. The existence of a buying committee would seem to differentiate the companies with respect to their tendencies when considering a reaction.

Of particular importance was the role that communications play in the decision-making process. Companies that emphasized communication between their buyers and the manufacturer exhibited a lower scale of reactions than was the case for the other companies. However, in cases where a manufacturer was clearly offering a level of service which was not sufficient, these companies took severe action more quickly than did the other companies.

Thus, when considering management styles, there would seem to be two factors which play a role in the

determining of the reaction to a service failure. The first is the ability of the buyer to act free of supervision by a buying committee. The second is the attitude within the company toward communication. In companies that emphasized the maintenance of strong channels of communication between their buyers and the various manufacturers, there is a lower level of severity in the reaction exhibited following a customer service failure and a generally higher level of service provided by the manufacturers.

#### Research Question F

##### Effects of Channel Variables

In examining the relationship between organizations which are performing the wholesaling function, and the manufacturers which supply products to these organizations, it would be impossible to consider these relationships without some investigation of the behavior of the major variables which help describe a distribution channel. The most prominent of these variables are role and role theory, channel power, conflict, and communication. Channel variables are not readily observable measures, but abstract terms which are examined through the interpretation of observed behavior.



## Roles and Role Theory

Each member of a channel occupies a position which can be readily defined and assumes the role of that position within the distribution channel. Each role within a channel has with it certain expected behaviors. The prescriptions, the behavior that ought to be engaged in, are the norm which define the expected behavior of any organization occupying a role within the distribution system (81:161). It was evident that some companies participating in this study have very well-defined sets of norms for the behavior of their suppliers with respect to the areas of customer service.

Any attempt by a supplier to deviate from these norms will result in sanctions, a demand for a certain prescribed behavior, backed by a means which tends to enforce conformance (81:160). These sanctions are the various reactions which were illustrated earlier in this chapter in Research Question A. Of further interest would be whether or not there are any positive, i.e., reinforcing sanctions. The use of positive sanction was not indicated in the responses.

Thus, when examining the relationship between manufacturers and the organizations performing the wholesaling functions within the grocery channel, the

effect of role theory would seem to be quite pronounced. Some wholesaler's prescribed behavior for the manufacturers with respect to customer service is well defined. Any attempt by a manufacturer to engage in any behavior outside of the prescribed norms would be met with severe sanctions.

The role of the manufacturer, as defined by buyers at the wholesale level, consists of the expected behavior concerning product availability, order cycle performance, product support (promotions, missionary sales, etc.), product assortment, and representation. The wholesale buyers consider the level of performance the manufacturer provides on the role variables as being irrevokable. An attempt by the manufacturer to change its role by lowering the level of performance on a role variable will be met with sanctions from the other channel members.

Product availability and order cycle time are the major role variables in this research. A review of the buyer responses in Chapter IV confirms that the wholesale buyers would not allow a manufacturer to lower service on either product availability or order cycle performance. The buyers also indicated that they would not allow the manufacturer to lower the present levels of service provided on any other role variables.

The direct and indirect reactions discussed earlier represent the sanctions that buyers use to enforce compliance with the role they have prescribed for manufacturers. Sanctions are a direct exercise of power. Thus, to the extent a buyer is able to, the power available within the channel will be used to enforce the role behavior of the manufacturer.

#### Channel Power

Power is defined as the ability of a channel member to control the decision variables in the marketing strategy of another member in the same channel at another level (70:13). Most theorists agree that power results from the possession or control of valued resources (81:93). An examination of the power sources of the wholesaling organizations and manufacturers would provide insight into the reaction decision.

For the wholesalers, the primary source of power is the control of access to retail shelf space. There are roughly two grocery products for every unit of shelf space available in a large grocery store. Thus, the control of the shelf space gives the wholesalers control of the success of the products competing for that shelf space.

The retail chain operations have the greatest power of the companies in the study. The link between the wholesale and retail level in these organizations is

absolute. The wholesale buyer, by not accepting a product, is automatically denying that product shelf space. The retail sponsored cooperative comes next in terms of power. By not carrying a product, the buyer may be denying the product shelf space. However, the relationship between the retail and wholesaler level is not as strong as in the retail chain. If the retail stores in a retail sponsored co-op want a product, they can force the buyer to add the product. Thus, the buyer in the retail cooperative is not in as strong a position as is the buyer for the integrated chain.

The buyer for the wholesale sponsored co-ops have the least power. The buyer for a wholesale -sponsored cooperative must be constantly concerned with the reaction of the retailer to the assortment of products offered. The elimination of a popular product may be enough for some retailers to switch vendors. Thus, to the extent that a manufacturer can create retailer demand for a product, the power will shift from the buyer to the manufacturer.

The manufacturer, primarily, derives power from the possession of a well-differentiated product with a strong consumer demand. A differentiated product possesses a high degree of uniqueness. Such a product will be demanded by consumers. The possession of a well-differentiated product gives the manufacturer some degree of power over the wholesaler.

The ability of the manufacturer to use this power in a coercive manner has been delimited by law. Any member of a channel is free not to do business with another, however, the withdrawal of a product for coercive reasons has been declared illegal. In addition, the manufacturer is unable to make the sales of a well-differentiated product conditional upon the sales of less desirable products because of the illegality of "tying" contracts. Therefore, the manufacturer's power derived from the possession of a well-differentiated product with a strong consumer demand has been negated to some degree by law.

The vulnerability of the remainder of the manufacturer's product line also lessens the manufacturer's power relative to that of the wholesaler. As was discussed earlier in this chapter, in the first research question, the buying organization will, in effect, force the manufacturer to provide good service on a strong product. The remainder of the manufacturer's product line will be held hostage for the performance of the strong product. Such reactions by the buyer are a form of indirect reaction.

The power the buyer has as a result of control of shelf space must be compared relative to the power the manufacturer has as a result of possession of strong products. Retail chains in this study have a very strong position relative to their suppliers due to their control of the

shelf space in their retail outlets. The retail sponsored cooperative has less power than the retail chain, and the buyer for the wholesaler sponsored co-op has the least power. As the buyer's control of the retail shelf space lessens, so does the buyer's power relative to the manufacturer.

If the answers to the first research question in Chapter IV are reviewed, a distinct difference can be discerned between the three retail grocery chains and the responses given by the other organizations. One company, a wholesaler whose only market is independent retailers, shows the least willingness to take action against a supplier and the most willingness to adapt internally. This company's reactions are in stark contrast to the responses of the retail chains. The responses of this company and the retailers parallel the power of each of these organizations.

The relationship between the manufacturer and wholesaler can be seen as a case of mutual dependence. The level of dependence of one channel member versus another will depend upon the power sources available to either member of the manufacturer-wholesaler dyad. The more power one dyad member has the greater the dependence of the inferior member.

A manufacturer with an undistinguished product line would be very dependent on a wholesale-retail chain which

has great volume. Similarly, a wholesaler sponsoring a voluntary co-op would be very dependent on a manufacturer possessing a strong brand name and a well-differentiated product line. Thus, sources of power allow a channel member to create dependence on the part of inferior channel members, and by use of the dependence to control the behavior of the other channel members.

In the case of the manufacturers and wholesalers under study, the use of power is quite clear. To the extent a wholesaler can guarantee retail shelf space the wholesaler can control the level of customer service offered by a manufacturer.

### Conflict

In any system, when a member perceives the behavior of another component to be impeding the attainment of its goals or the effective performance of its role, an atmosphere of frustration prevails. A state of conflict could therefore, exist when two or more members of any system, e.g., a channel of distribution, become objects of each other's frustration (81:156). Conflict here is viewed as a process of changes in the task environment, in the individual firms within a channel system, and/or in the relationships between the elements of the environment and channel members. Increased financial pressure on all channel members to reduce the investment in inventory is such a change.





The reductions in inventory by a manufacturer are a response to a change in the task environment. Increasing costs of money have put pressure on both manufacturers and wholesalers to reduce inventories. In effect, both the manufacturer and wholesaler are attempting to force inventory on each other. Such a change by the wholesaler and retailer reduces the availability of a product in the channel and thereby the level of customer service offered. The mutual reductions in service would produce frustration on the part of both the wholesaler and manufacturer. The result is conflict.

The reduction of service as an attempt to force inventory down the channel can also be seen as a departure from the norms expected from an organization occupying the role of manufacturer in a channel. The resulting sanctions would be an exercise in power. Usually, the first reaction to frustration (conflict) is an attempt to remove its cause (81:161). In a distribution channel, an effort by one member to change the behavior of another channel member is an exercise of power. The use of direct and indirect reactions is an exercise of power in an attempt to force the wholesaler to continue to provide acceptable service.

However, the use of power often is a coercive act, a form of punishment. It has been suggested that the use of coercive power only serves to heighten future conflict within the channel (56). The higher level of conflict

was evident in the case of Companies A and F, which were quite willing to use severe measures to force the manufacturer to provide good service. Both Companies A and F experienced higher conflict as a result of their actions than did Company D, which emphasized communication in the channel. An attempt should be made to resolve the conflict through some other means before resorting to the use of power.

#### Communications

Communication, like roles, is a means of coordinating the members of a behavior system. As such, communication can both cause and prevent conflict. A system holds its members together in a viable network only when the members are willing to remain in the system. Each member is induced to participate in a channel of distribution by the offering of certain rewards for its supposedly unique potential contribution. Some of these contributions may take the form of avoiding certain types of behavior which, though beneficial for the unit, are detrimental to the entire system.

One of the behaviors that should be avoided is the effort by the manufacturer to force inventory, and its resultant cost and risk, down the channel onto the wholesaler and retailers. As discussed earlier, such an effort produces high levels of conflict within the channel.

The ultimate outcome of conflict is either the disintegration of the channel or unification (82:171).

In this research the disintegration of a channel would be the delisting of a manufacturer's entire product line. An example of efforts at unification can be seen in the responses of Company D. Company D was able to remove the cause of much of the conflict within their channels through the use of communication. The use of communication facilitated a negotiation process which lowered the conflict between Company D and the manufacturers. The result was usually a resolution of the conflict and a partial removal of the source of the conflict, a unification outcome.

Unification is a continuum. The lower limit of the continuum is the elimination of conflict behavior without the elimination of the source of frustration. The parties to the conflict decide that their other alternatives cannot provide an equivalent level of satisfaction as that experienced in their present alignment, and the relationship continues even though the conflict has not been resolved.

The upper-limit of the unification continuum is the reestablishment of system stability and the elimination of frustration. The system exhibits long-term stability, at least in respect to the relationship which initially triggered the conflict. Between the two limits, the degree of unification varies with the frustration remaining after discontinuance of conflict behavior.

The example of Company D which attempted to achieve a high level of unification outcome through the use of communications stands in contrast to Company F. Company F did not use communication to any significant degree when compared to Company D. Company F stood ever ready to utilize their power to force compliance with the role they had prescribed for the manufacturers. The result for Company F was a higher level of conflict and a less stable environment.

Communication can induce conflict by neglecting to inform a member of a channel dyad of the role expectations the other member of the dyad has for them. If this is the case, a channel member may violate the norms held for its role initiating sanctions and thereby conflict. The non-performance of communication can then be seen as the initiator of conflict.

However, by properly performing its role, communication can allow channel members to engage in a process through which the conflict can be resolved. If the parties attempt only to exercise power, conflict will not be resolved; there must be some accommodation. What is necessary is a process by which the parties of the dyad engage in a simultaneous exercise of power and organizational change. The process utilizing high levels of communication will resolve the conflict without forcing

either of the parties to surpass any threshold which might lead the member to withdraw from the channel.

If the responses of Company D are examined, the effects of communication are evident. There is a lower order of conflict present than in the case for either of the other retail chains. The lower level of conflict is primarily due to the effects of communication. Both the buyers and manufacturers are aware of the other's position. When any frustration is encountered, there is an attempt through negotiation to reach an accommodation before power is exercised.

In reviewing the effects of the channel variables, the impact would seem to be quite pronounced. The roles, power, conflict, and communication (conflict resolution) variables would seem to be well defined in these situations. Therefore, the reactions by buyers in response to a customer service failure can be explained by channel theory and, in retrospect, would seem predictable.

### Conclusion

The research questions illustrate some interesting points: There is a standard set of reactions to service failures. The set of reactions can be divided into two subsets: short-run reactions to a specific service failure, and long-run reactions which are in response to an overall level of service offered by a manufacturer. The long-run



subset of reactions can further be divided into three headings: the direct reactions which are taken against the product causing problems, the indirect reactions which are taken against other parts of the manufacturer's product line, and the internal adjustments that a wholesaler might make.

The decision to take some form of long-run reaction is dependent on the prior service history of the manufacturer. The short-run reactions are not a major determinant of long-run reactions, due to the narrow choice of short-run reactions. The final decision to take a long-run reaction is dependent on the wholesale buyer's perceptions of the manufacturer's prior service level.

Once the decision to take a form of long-run reaction has been made, the specific reaction chosen will be a function of the situational variables. The situation is defined by several factors: product competitive position, product volume, brand loyalty, strength of the remainder of the product line, substitutability of the product, and promotional support offered by the manufacturer.

The behavior of the manufacturer and wholesaler involved in a service failure can be explained by a combination of channel variables. The variables of role, conflict, power, and communication are quite valid in this application of channel theory. A further study of

channel power in terms of countervailing power seems quite applicable (see Appendix C).

#### Potential Costs of a Service Failure

In examining the potential costs of a service failure, there are some difficulties in separating the cost of a single service failure from the costs associated with an overall level of customer service. In the short-run there are three potential costs associated with a customer service failure. The first of these is the cost of a lost sale. The second is the potential loss in gross margin resulting from substitution. The third is the loss in customer goodwill following a service failure.

In the long-run an individual service failure is not considered in and of itself; rather, the service failure is viewed in light of the general customer service record of the manufacturer. Therefore, a service failure by one firm may bring only minor short-run costs while a competitor experiencing the same type of service failure may incur far heavier long-term costs because of a poor, overall record of customer service.

In the short run, whenever a customer service failure occurs, there is the potential for lost sales. Any service failure which results in a stockout on the retail shelf will potentially produce a lost sale. In



the situation where the buying organization's safety stock prevents the service failure from causing an out-of-stock situation on the retail store shelf, there will be no cost of a lost sale because the consumer's consumption of the product has gone on uninterrupted.

The short-run cost is that involved in substituting one size for another, or one product for another, in response to a stockout. In some isolated instances where there is sufficient lead time, a buyer will accept a different size of the product when the original size ordered is not available. In most cases, buyers indicated that substitution involved accepting a smaller size than was first ordered. The acceptance of a smaller size results in a loss of both revenue and profit to the manufacturer and wholesaler.

The last of the short-run costs looks at the over-worked term "loss of customer goodwill." In essence, the loss of goodwill is the same phenomenon addressed by Chang when he hypothesized the cognitive period. Following a service failure, customers are sensitized to the issue of customer service. The service failure has caused doubt about the level of service being offered by the supplier. As Chang hypothesized, time will moderate the effects of a failure. Subsequent purchases by the buyer with adequate

service will also act to eliminate the effects of the service failures. However, some period of time must elapse before the damage done by the service failure is overcome.

In the long-run, the costs associated with a level of service can be much greater than the cost for a single service failure. The reactions which are responsible for both short-run and long-run costs are triggered by an individual service failure. However, the costs, resulting from the long-run reaction are not directly attributable to the service failure which triggered the reaction. With a given time period, each additional service failure would seem to have an increasing probability of triggering a long-run type of reaction. The situation is due to the link between each ensuing service failure and the prior service record of the supplier. Each service failure detracts from the record of past service, emphasizing the lower level of customer service offered by the supplier. Each additional failure brings the buyer closer to a point where some form of long-run action would be taken.

Thus, the long-run costs are not associated with a given service failure, but with the overall level of customer service. The long-run costs can be from actions taken directly against a product which has been the source of problems, or indirectly against the entire product line of the manufacturer. There are four primary types of

long-run costs that a manufacturer can incur. The first is the cost(s) associated with a loss of shelf space. The second is the cost that occurs when the other channel members refuse to participate in the manufacturer's promotions. The third is the cost resulting from the product delisting or discontinuance. Fourth and last, is the cost associated with a buying organization not accepting the manufacturer's new product offerings.

In the grocery industry, there is no more valuable possession for a product than shelf space. Large amounts of shelf space are given only to successful large volume products; a product can become a large volume product only if it has a large shelf space. The relationship between volume and shelf space is a vicious cycle for grocery products. The loss of shelf space represents a serious blow to a product and its manufacturer. By cutting the shelf space of a product, the buying company is reducing the sales of the product and the profits of the manufacturer.

When a grocery chain or retailer cuts the shelf space on a product, it is also harming itself. If the shelf space cannot be filled by a product which will yield equal sales and profits, then the retailer is also a loser, along with the manufacturer. However, in the case where there are competing products of similar demand and gross

margin, the retailer will be equally pleased with either product as long as profits, volume, and turnover do not suffer. Such a switch in shelf space from a manufacturer to its competitor would be a blow to the manufacturer. The effect of a cut in shelf space is usually a decline in sales volume; however, the refusal to participate in a manufacturer's promotions has effects that are not so readily apparent.

A manufacturer designs promotions to achieve certain marketing objectives, be it increased usage, greater market share, or other goals. Some elements of the manufacturer's promotional mix are controlled by the manufacturer, consumer advertising or national coupons, for example. However, large elements of the manufacturer's promotional mix depend upon the cooperation of the channel members performing the wholesaling and retailing function.

A large part of many manufacturer's promotional mixes involve: cents off deals which are to be passed on to the consumer, local coupons to be offered by the grocery organization, or cooperative advertising allowances. These types of promotions require the cooperation of the wholesaler or retailer in the channel. In any given week there are approximately 2,000 deals or promotions currently under way in the grocery industry. On the average, a grocery chain or wholesaler will choose 40 products to feature during the week. This is approximately 5% of the total

possible promotions that might have been chosen; obviously the competition for promotional cooperation is as fierce as that for shelf space.

For the manufacturer whose promotions are not adopted, the cost is the failure of some part of this manufacturer's marketing strategy. The cost of this in terms of dollars and cents would probably be difficult, even for the manufacturer, to determine. However, the costs in terms of time, market share, competitive position, and effort must surely be high. For any company, the failure of some part of their marketing strategy is a serious blow.

In the present, the manufacturer who sees the failures of its promotions has suffered a blow. In the future such a loss will have a carry-over effect. A manufacturer whose promotions have been spurned will have fewer promotional options in the future. A reduction in options will limit, to some extent, the manufacturer's ability to compete with other manufacturers for acceptance within the consumer market.

For most buyers, the most draconian reaction available to them was to delist a product, i.e., to discontinue the item as part of their overall product mix. Delisting is obviously a heavy blow to a manufacturer. The only heavier blow would be the discontinuance of the entire product line of the manufacturer. Such an action removes

the manufacturer from the segment of the market served by the grocery marketing organization.

Delisting may also cost the manufacturer in his relationship with other grocery buyers. Once a product has been discontinued by one grocery organization, the opportunity exists for the other competing organizations to follow suit with less fear or risk. The main buyer concern when delisting a product is that some consumers will switch to another source which still carries the product. However, once a buyer has delisted a product, the competition may feel free to delist the product with less potential risk of loss of consumers.

The last cost is the cost that results from grocery buyer's refusal to accept a new product offering, or only partially accepting a manufacturer's new product offering. Developmental costs are extremely high on a new product. Even without the problem of acceptance by the channel, the chances of success for a new product offering are low. If the buyers for grocery companies are already predisposed not to accept the new product, the chances for success would seem to be far less than normal.

Non-acceptance of a product may be the most far reaching and damaging of the potential long-run costs of a stockout from the standpoint of the manufacturer. If, during the critical introductory period, the product is

not on the store shelves for customers to try, there may be little chance of success for the product. In this case, all of the developmental costs of the product will be for naught and all the future profits that might have been realized from this product will be foregone. The dollar cost of the failures of a new product can only be estimated by a manufacturer. However, the costs of foregone future profits must certainly be high.

In summation, the costs of a service failure to a manufacturer can be divided into two types: the immediate short-run cost and the longer-run costs that result from reactions to the overall level of service offered, as opposed to an individual service failure. Within the channel, the long-run costs have the potential to be far larger than the short-run costs. In particular, the manufacturer should be concerned with the indirect reactions and their resultant costs, especially the potential costs of non-adoption of new product offerings.

### Recommendations

The recommendations are divided into two segments: the recommendations to manufacturers of grocery products and recommendations to buyers at the wholesale level in a grocery channel.

### Recommendations to Grocery Buyers

The direct and indirect reactions of wholesale grocery buyers to customer service failures represent an attitude to force the grocery manufacturers to provide an acceptable level of customer service. The buyer's definition of an acceptable level of customer service is of extreme importance. It is the buyer's definition of the appropriate level of customer service that triggers any form of reaction in response to a level of customer service judged as deficient.

The development of the buyer's perception of adequate customer service is the first area covered in this recommendation section. The reactions used by the buyer and their effectiveness is the second section covered. The uses of communication represents the third area, and the information system used by the buyer is the last area covered.

#### Development of Service Requirements

In examining the reactions of wholesale grocery buyers to customer service failures, the buyers' standards for customer service levels play an interesting role. Many buyers could not define the levels of customer service which they would or would not find acceptable. The buyers' only perception of customer service levels involved the affect



of the service offered on the buyers' ability to perform those tasks upon which the buyers were measured. The buyers' perception of customer service levels were: the level of inventory turnover that could be obtained, the level of product availability that could be offered to the retail stores.

Thus, the buyer would often change the standards for customer service as the demands of retail service or inventory turnover changed. Because of the changing standards, confusing signals were being sent to manufacturers. Levels of customer service that might have been acceptable suddenly were no longer acceptable. The result of the variable policy was confusion and frustration within the channel. In recognition of their variable service policy, the wholesale buyer must recognize the role that the standards for customer service play in the distribution channel.

1. The buyers' standards should be set so that the goals of the buying organization can be met. The wholesaling organization's goals consist of certain levels of inventory turnover and a certain level of product availability to the retail level of the channel.

2. The buyer must also recognize that the standards of service are the criteria that the manufacturer will attempt to meet, therefore standards must be set at a

level that will be acceptable to the manufacturer. The buyer must compromise between his own company's goals and the acceptable demands that can be made on the manufacturer. The buyer will have to determine a standard for customer service that will allow both the manufacturer and wholesaler to meet their objectives.

3. The standards will have to be within the limits of acceptability for the wholesaler and manufacturer, or the manufacturer may withdraw from the channel.

4. If the buyer changes the standards for service, the changes should be communicated to the manufacturer in advance, with sufficient lead time to allow the manufacturer to reply if the new standards are unacceptable. The manufacturer must be aware of the standards of the buyer and must agree that the standards are reasonable. The agreement of the manufacturer that the standards are reasonable is necessary if the channel is to survive. If the manufacturer perceives the standards of the buyer as unreasonable, it may withdraw from the channel.

#### Use of Reactions

One buyer stated that, "insofar as a manufacturer wishes to do business with us [the wholesaler], he [the manufacturer] can be forced to provide adequate service." Thus, so long as a manufacturer does not choose to withdraw

from the channel, measures can be taken against the manufacturer to force it to comply with the buyers' standards for customer service. The determination of the appropriate reaction to take to force a manufacturer to improve its service is an important buyer decision.

1. The buyer should recognize that some reactions that can be taken will harm the buying organization as well as the manufacturer. Taking action against a popular and well-differentiated product will hurt the wholesale and retail levels of the channel through lower sales and profits. Sometimes actions against a strong product are necessary; however, more often there are alternatives available which might be equally effective and less costly.

2. The buyer should encourage the wholesale organization to determine the reaction of consumers to the various alternatives open in response to a service failure. If the buyer is unsupported, he must rely on instinct, gut feeling, or on information provided by the manufacturer's representative.

3. The buyer must have the ability to estimate the costs of the consumer's displeasure. If the buyer does not have some information about consumer response to the reactions the buyer might take, the use of responses will be less effective than it might be. The buyer might well take

a strong form of action where in actuality the costs may outweigh the benefits.

4. The use of various forms of indirect reactions may be the most cost-effective way of forcing the manufacturer to improve its service, if a manufacturer is not providing a level of service that is up to the standards set by the buyer. The indirect reactions include: cutting of shelf space, refusing manufacturer sponsored promotions, delisting products, and not accepting new product offerings of the manufacturer.

5. The indirect reactions are usually taken against the weaker parts of a manufacturer's product line. The weaker products usually are those that require more cooperation from the wholesale and retail levels of the channel to be successful. However, the weaker products may not be of great importance to the manufacturer. Indirect reactions taken against weak products will be successful only to the extent that the manufacturer has an interest in the success of the products.

6. Reactions aimed at new product introductions of the manufacturer are perhaps the most serious of the indirect reactions that might be taken against the manufacturer. The non-acceptance, or partial acceptance, of a new product offering threatens the success of a product in which the manufacturer has a large investment and as yet has had no chance to recover any costs.

7. The reaction against new product offerings of the manufacturer has the potential of extremely high costs for the manufacturer. The manufacturer has already invested large amounts of time and capital into a new product when it is offered to the market. Non-acceptance of the product will bring all of the previous investment and effort to naught. In addition, the manufacturer will have to forego all the potential revenue and profit that would have accrued as the result of a successful product. The loss of future profits and fortification of the product line will have costs far into the future for the manufacturer.

The non-acceptance of a new product offering also has associated risks for the buyer. The product may prove to be quite popular with consumers. In such a case the buyer would be pressured to adopt the product by the retail level in the channel. If the buyer adopts the product, the manufacturer would be further immune to pressure by the buyer.

8. To be effective the threat of non-acceptance must be communicated to the manufacturer. The manufacturer must be aware that continued poor performance with respect to customer service will result in buyer resistance to new product offerings. Unless the manufacturer perceives the threat, the reaction will be ineffective.

The effectiveness of non-adoption, like all other reactions, depends upon communication. The manufacturer must be made aware that the reactions that are taken are in direct response to the manufacturer's service inadequacies. There is always the danger that the manufacturer will not see the reaction as a direct response to service failures in the absence of adequate communication.

#### Buyer Use of Communication

The buyer, like the manufacturer, can use communication. As stated above, the buyer must communicate with the manufacturer in order to make reactions effective. The communication element can be more productive than just making reactions more effective.

Reactions to service failures are a result of some action by the manufacturer which frustrates the buyer. The reactions chosen by the buyer may prove equally frustrating to the manufacturer. Out of a situation of mutual frustrations can come channel conflicts and as a result, channel inefficiencies. Communication can fulfill two important functions: the prevention of channel conflict and the resolution of channel conflict in such a way that the source of the conflict is eliminated.

1. Through the use of communication, channel conflict can be prevented to some degree. Initially, through



the communication process, the buyer can inform the manufacturers of the expectations of the role the manufacturer occupies in the distribution channel. Key elements of the buyer's expectations are the standards of customer service that the buyer expects from the manufacturer.

2. If the buyer is explicit about the standards of service expected from a manufacturer, there exists no opportunity for misunderstanding. If the manufacturer delivers a level of service beneath the buyer's expectations, it will be done with the knowledge that the service was inadequate.

3. If the manufacturer should find the buyer's standards unreasonable, the communication channel will give the manufacturer a chance to express its views. The potential will then exist for a negotiated set of standards that will be acceptable to both the wholesaler and the manufacturer. Thus, the communication system can help prevent some types of service failures.

4. Through the process of staying in contact with the manufacturers, a buyer can gain information about the manufacturer which may help prevent service failures. If, for some reason, the manufacturer were about to go on product allocation, or some other form of reduced production, by staying in contact, the buyer may be able



to gain advanced warning of the manufacturer's problems and take some action which would prevent any disruption of the wholesaler's operations. Such actions may involve the building up of inventories in advance, or placing orders with substitute suppliers. By staying aware of manufacturer circumstances, the buyer can avoid disruption of the wholesale function.

5. The buyer should resort to communication in an effort to avoid possible conflict, in the case where a service failure does occur. If the buyer first attempts to determine the cause of the service failure, much additional conflict in the channel could be avoided. If the service failure was simply a result of manufacturer non-performance, reactions could be used. However, if the service failure was a result of circumstances beyond the control of the manufacturer, reactions taken against the manufacturer would produce no result, and could further heighten conflict within the channel. If the buyer utilizes communication before reacting, situations such as the above could be avoided.

#### Long-Run Uses of Communication

In the long-run, the use of communication may have significant benefits for overall channel performance. In much the same manner as described in the section Recommendations to Manufacturers, the communication

process can provide for a negotiated solution to channel conflict which will not only resolve the conflict but also eliminate most or all of the cause of the conflict.

1. In addition to the negotiation type solutions to conflict, communication should prompt channel changes which will improve overall channel efficiencies. If conflict arises as a result of changes in the task environment, a resolution of the conflict, high on the scale of unification outcomes, should improve the overall performance of the channel. Channel improvement would be a result of an outcome which reordered the functions performed in the channel in such a way that the channel was more efficient than before.

2. The reordering of channel functions and the restructuring of the roles of the channel members, can only come about through the simultaneous use of channel power and communication. A further step would be the integration of the channel by using communication to draw the members of the channel closer together. If the buyers can be induced to coordinate their activities closer with the manufacturers, and the manufacturers to coordinate their actions closer with the buyers, the result would be a more efficient channel. Such a use of communication would be of benefit to all members of the channel.

### Buyer Information

A buyer can only be as effective as the information sources which are available. The information system which provides the buyer with the levels of service that a manufacturer has provided are especially important. The buyer will establish standards of customer service that the manufacturer should deliver. If the information system that supports the buyer does not accurately measure the level of service provided by the manufacturer, the standards established by the buyer will be far less effective.

As discussed in the previous section, the information system supporting the buyer is of particular importance. The best type of system is one which records the service failures of the manufacturer on a continuous record. Such a system allows a buyer to calculate the level of performance of a manufacturer over any time period desired. The record of service failures augmented by some measure of the level of severity of the failures would provide a better record of manufacturer performance than is currently the case. Such a record could then be measured against the buyers' standards for customer service to determine whether or not the buyer should take some form of action against the manufacturer.

### Recommendations to Grocery Manufacturers

For grocery manufacturers the prime objective is the maximization of profits for a given level of sales revenue. The purpose of the research, as stated in the first chapter, is to investigate the reactions of one set of buyers to customer service failures. Determining the buyer's reaction is a first step toward calculating the costs associated with a level of customer service.

#### Calculating Costs of Reactions

For a grocery manufacturer to better manage the distribution function, a first step would be to determine the dollar costs associated with both the short- and long-run reactions identified in Chapter IV. The determining of the costs associated with the reactions would lead directly to a second step: the recognition of the probability of experiencing a long-run reaction to service failure. The determination of the costs, and the probability of incurring the costs, are necessary for a manufacturer to balance the costs of providing a level of service with the costs that will result from the level of service.

1. To begin to determine the appropriate level of customer service, a manufacturer must first estimate the dollar costs that are associated with both the long- and short-run reactions. In order to estimate the costs



associated with each type of reaction, the manufacturer must determine the effect that each type of reaction will have on the marketing mix. The effect that each type of reaction has must then be analyzed to determine which parts of the marketing mix are affected.

1. The reaction effects are of three types: marketing opportunities foregone, failure of some elements of the marketing mix, and costs incurred to correct the damage from a reaction. All three of these costs have some dollar value that can be assigned to them. The most difficult cost to determine is the cost of an opportunity foregone. However, because of the enormity of the potential cost of opportunities foregone, the cost must be estimated. The easiest cost to ascertain is the revenue and profit losses due to a short-run reaction, as was illustrated by Chang and Walter.

2. Once the dollar costs associated with each type of service failure are estimated, the second step is to estimate the probability of experiencing any type of long-run reaction. The probability of any long-run reaction is a joint probability where the long-run reaction is conditioned on the situational variables present during the service failure.

3. The grocery manufacturer must recognize the effect of situational variables on the type of long-run

reaction exhibited. The occurrence of a long-run reaction is a function of the past service record of the manufacturer. The type of long-run reaction is a function of the situation.

4. To determine the probability of a type of long-run reaction, the manufacturer should examine the current level of service offered to his customers and the situational variables listed in the generalized model of reactions to service failures. The probability of a long-run reaction by a wholesale buyer increases with every manufacturer service failure during a given period of time. As would be expected, the lower the level of service offered to a customer, the more likely that there would be a long-run reaction to a service failure. Thus, the probability of some type of long-run reaction is a partial function of the level of service offered by a manufacturer.

5. While the probability of some type of a long-run reaction is a function of manufacturer service levels, the specific type of reaction is a function of the situational variables. The situational variables are:

- Product volume,
- Product uniqueness,
- Product gross margin,
- Strength of the remainder of the manufacturer's product line,





- Competitive position of both the manufacturer and buying organization,
- Promotional support for the product line offered by the manufacturer, and
- Buyer expectations.

These situational variables are those that are indicated as the major effects that define the situation for a service failure. The situational variables are modified by: type of service failure, type of buying organization (retail chain or wholesaler), record of past long-run reactions against the manufacturer, the presence of a buying committee.

6. The manufacturer should recognize the effect of the situational variables, especially those variables that define the channel power of the manufacturer and wholesale organization. A manufacturer when dealing with a wholesaler sponsored voluntary cooperative, may be in a position where the type of long-run reaction would be some form of internal action. Internal adjustment would be especially prevalent where the manufacturer's product has a strong consumer franchise.

A manufacturer with a wide product line with varying degrees of consumer loyalty would be in a position where the weaker elements would be held hostage for the service offered on the popular products, a form of indirect long-run reactions (see Appendix C). Another form of

long-run reaction would be to refuse to accept a new product offering of the manufacture. Non-adoption might be a reaction taken against a manufacturer unable to do enough consumer advertising to "force" the product onto the retail shelf. All of the long-run reactions are a function of the situational variables.

7. The manufacturer should take the lead in investigating the reactions of consumers to the direct or indirect reaction a buyer might take. The buyer's reactions are taken with an assumption as to how the consumers will react. If a manufacturer can determine that the consumers will react in a manner harmful to the wholesaler, this could be the base for a significant differential advantage.

By knowing how consumers will respond to buyer reactions, the manufacturer will be better able to determine its service strategy. If the consumers will switch outlets when the manufacturer's products are not present, there could be a potential for forcing the wholesaler into some form of internal adjustment. If, on the other hand, the consumers are indifferent to the presence of the manufacturer's product line, the manufacturer must recognize the need for a sufficiently high level of service.

8. One final situational variable that must be considered is the buyer expectation of manufacturer performance. The role prescribed for the manufacturer by the

buyer may not be the same channel role the manufacturer perceives. The resulting unintentional failure by the manufacturer to fulfill the buyer expectations may cause the buyer to take a more severe type of long-run reaction than would normally be the case. The manufacturer must recognize the uses of communication in lessening the chance of a long-run reaction or lessening the severity of a long-run reaction.

#### Use of Customer Service as a Differential Advantage

The manufacturer must also recognize that the level of customer service offered can be used as a positive factor as well as a basis for costly customer reactions. The focus of this research is on the negative costs associated with service levels. However, the positive potential of a service level must also be recognized.

1. If a manufacturer maintains its own internal record of the level of customer service it is providing, the potential exists to establish a positive differential advantage in the market. A manufacturer that provides a superior level of customer service, in excess of buyer requirements, is in a position to establish a competitive advantage that will be hard to neutralize.

2. The manufacturer, if able to document the high service level, can approach the wholesale buyer with



suggestions which would allow the buyer to lower wholesale inventory levels and thereby increase product turnover. The increase in turnover velocity would result in increased wholesale profits. Thus, the manufacturer would have established itself in a very strong competitive position.

#### Uses of Communication

Short-run uses. Through the use of communication, the manufacturer may be able to reduce the chance of a long-run reaction. Operationally, the manufacturer may be able to allow the substitution alternative to be used more freely by utilizing communication. In the long-run, channel conflict may be reduced or eliminated through the use of communication.

1. By utilizing communication as an integral part of operations, the manufacturer may be in a position to enable the buyer to use the substitution alternative far more frequently than it is presently used. The substitution alternative is only possible when advanced notification is received of any impending stockout or "short-ship." By routinely utilizing communication, the manufacturer would be establishing a system that would allow early notification of potential stockouts or "short-ships." The early notification would enable the buyer to substitute for the product in short supply when alternatives are available.



2. By informing the buyer of impending service failures early enough to take positive action, the manufacturer would be lessening the severity of an availability type of stockout. The buyers, as a group, agreed that one of the most damaging features of a "short-ship" was the lack of advanced notice. By establishing an open channel of communication with the buyers, the manufacturer would be lessening the damage done to the buying organization by a stockout or "short-ship." Such actions would improve the customer perceptions of the overall level of service offered by the manufacturer.

Similarly, if the manufacturer routinely notified the buyer of the shipping date on all orders, the buyer would be in a position to monitor the consistency of performance of both the manufacturer and carrier on order cycle time. The buyer would also be in a position where any potential problems from an order cycle time service failure could be anticipated and provided for. Like availability, communication would lessen the severity of order cycle service failures.

The improvement in the buyer's perception of the manufacturer's customer service performance would lessen the probability of a long-run reaction being taken. Even in cases where the manufacturer's record of service was computer maintained, the buyer's perception would be one





of less severe service failures. The major determinant of whether or not a long-run reaction would be taken is the past service record of the manufacturer. By using communication to improve the perception of the level of service offered, the manufacturer is postponing or avoiding the time when a long-run reaction would be taken.

Long-run uses. In the long-run, the use of communication may have significant benefits for overall channel performance. Due to increased economic pressures in the past decade, and anticipated economic pressures in the future, both manufactureres and wholesalers are attempting to reduce inventory levels for a given sales volume. The reduction in inventory is an effort to improve asset performance. The result of the attempt by both parties to reduce inventories results in both the manufacturer and wholesaler trying to force the other members in the channel to carry additional inventory.

The simultaneous effort to reduce inventories results in a high conflict situation within the channel. The efforts by one channel member to reduce inventory can only be accomplished at the expense of some other channel member(s). However, through the use of a communication process, the conflict can be resolved in a manner that will remove, either entirely or partially, the cause of the conflict.

1. The use of communication can facilitate a negotiation process involving a simultaneous exercise of power. The negotiation process would be based on the amount of accommodation each party is willing to make--the level of accommodation of each party being based on, in part, the channel member's costs of obtaining the contributions of the other channel member from another source (63:166).

The problem of the negotiation process is one of devising a plan that will resolve the conflict by removing as much of the source of conflict as possible without requiring either the manufacturer or wholesaler to surpass its accommodation limit. Such a solution would yield some level of savings to both channel members while improving the overall level of channel efficiency.

2. The use of negotiation to resolve conflict depends largely on the trust each participant in the process has in the other. A non-trust relationship is generally resolved through suppression and war-like behavior (63:166). However, in situations based on trust, negotiations can result in a solution, where each channel member achieves benefits based upon mutual agreement and overall channel efficiency (91:103).

The usefulness of negotiations, as a process for conflict resolution, depends on the nature of the communication that exists between channel members. The more free

flowing and clearly received in communications, the greater the chance for a successful negotiation conclusion.

### Summary

In summation, the manufacturer and buyer must become better aware of the importance of service failures and the costs to the entire grocery channel of inadequate customer service. The recommendations are designed to bring both the wholesale buyer and manufacturer into closer contact. The emphasis on communication for both parties is obvious.

The wholesale buyer and manufacturer have the opportunity to contribute significantly to increased efficiency in the channel. Through the use of communications, both parties can better understand the needs and constraints each faces. Through mutual understanding, levels of customer service can be established that reflect both the needs of buyers and constraints on manufacturers. These new service levels, arrived at through a negotiation process, would have the support of both parties. The resulting lessening of conflict and lowering of inventory in the channel as a result of cooperation would lead to a more efficient marketing channel.



A Generalized Model of the Reaction  
to a Customer Service Failure  
in the Grocery Channel

A generalized model of the reaction to a service failure must necessarily start with the service failure. When a service failure occurs, its type and the specific situation with respect to time will determine what short-run reaction will be exhibited (see Figure 5-1). If the service failure was either a stockout or a "short-ship," the possibility of substitution exists if there is sufficient time to avoid a stockout by the wholesaler to the retailer, or substitution by the retailer to the final consumer.

Once the short-run reaction to a service failure has taken place, the buyer or buying organization must make a decision as to whether or not the organization will exhibit some form of a long-run reaction. The decision essentially is a function of the past service levels of the supplier as are perceived by the buyer. When the service level, as perceived by the buyer, drops below a certain level which the buyer expects the manufacturer to maintain, the result will be a decision to undertake some form of a long-run reaction.

The internal record keeping of the firm is a major factor in the decision to take a long-run reaction. In the organizations which rely on the buyer's memory to maintain a record of the supplier's service, there must be some

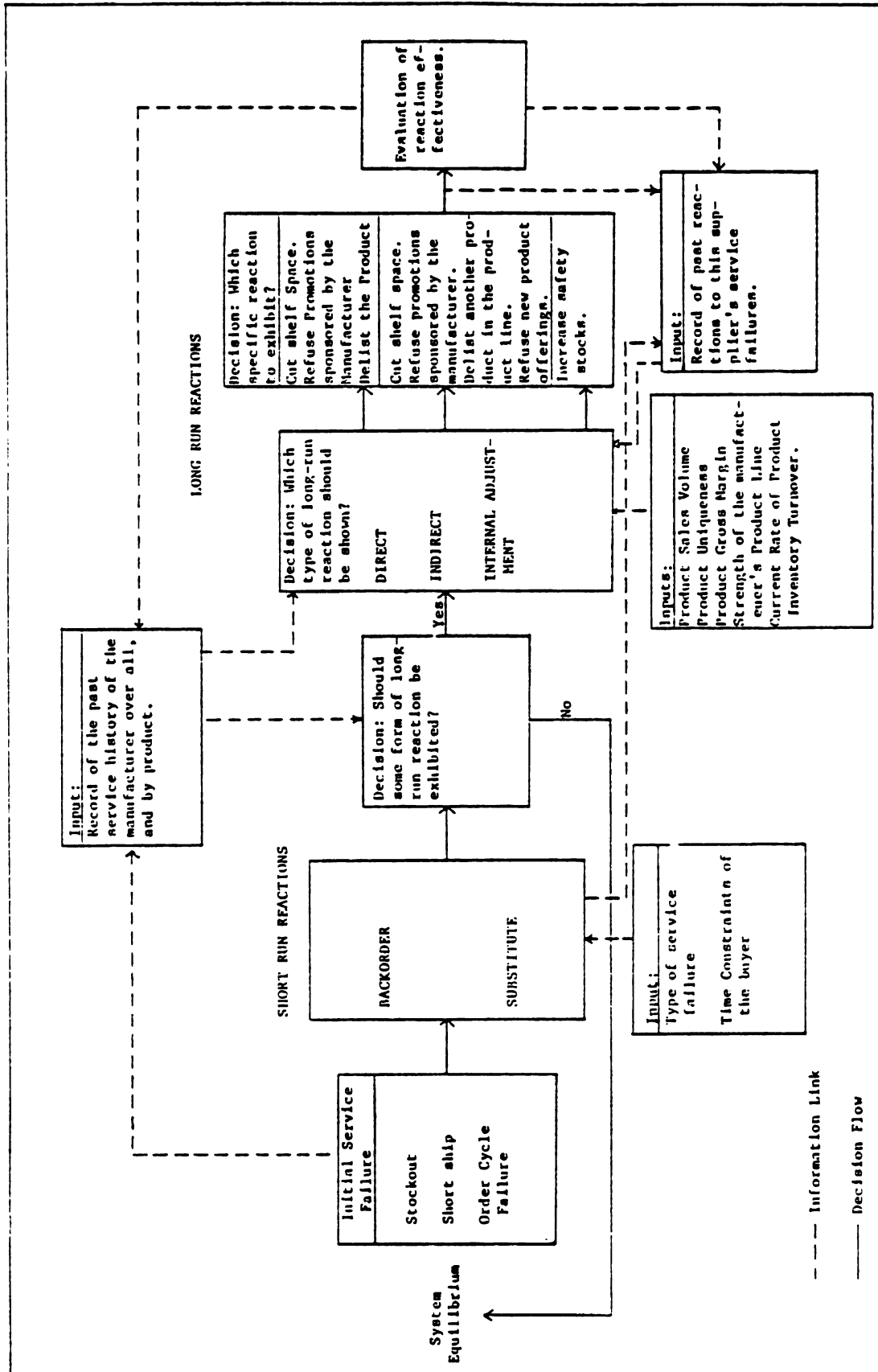


Figure 5-1. Generalized Model of Reactions to Customer Service Failures



question as to whether the buyer is reacting to the true record of service offered by the supplier in the past, or the perceived level of service which may not accurately reflect the true record. In the situation where a buyer is relying on memory, he would seem to be reacting to severity and time elapsed since the service failures occurred. In an organization which maintains an updated record of the buyer's service failures, augmented by the buyer's perception of severity, the buyer would be reacting to a more accurate reflection on the past service record of the supplier.

If the decision on long-run reactions is affirmative, there is a further set of decisions to consider. The buyer, or buying organization, must decide whether to take a direct or indirect type of action against the supplier, or barring action against the supplier, to take some action to adjust internally to the lower level of service being offered by the supplier.

The decision will be a function of several situational variables such as:

- Product volume,
- Product uniqueness,
- Product gross margin,
- Strength of the remainder of the manufacturer's product line,
- Competitive position of both the manufacturer and buying organization,





- Promotional support for the product line offered by the manufacturer, and
- Buyer expectations.

These factors, and their interactions, will determine what type of long-run reaction the buyer will take in response to the manufacturer's level of service. The decision will also be affected by the prior record of reactions that the buyer has taken in response to this particular manufacturer's service offerings.

The decision to make some form of internal adjustment as opposed to taking some form of direct or indirect reaction is a function of channel power. The decision to make an internal adjustment is an admission by the buying organization that the manufacturer is the dominant member of the buyer-seller dyad. In the model of channel member behavior outlined in Appendix A, this action is a form of conflict resolution which El-Ansary and Robicheaux would form a performance satisfaction/dissatisfaction variable. Stern and Gorman would term this a unification type of conflict outcome, but an outcome of the low end of the continuum of unification outcomes (70:14).

The internal adjustment responses all result in the buyer carrying additional inventory. Additional inventory, in turn, lowers the level of inventory turnover on the product. The act of lowering the inventory turns on a product will lower the return on investment of the buying

organization. Reduction in inventory turnover is extremely unsatisfactory and leaves a great deal of frustration present in the buyer-seller dyad. The frustration can serve as the basis for future conflict within the channel.

The decision to exhibit some form of direct or indirect reaction is a use of power by the buyer to remove the source of frustration from the relationship between the buyer and manufacturer. The use of power by itself is not necessarily the best way to resolve conflict. The use of the communication-bargaining variables as outlined by El-Ansary and Robicheaux would seem to offer a better solution. The process of bargaining is a simultaneous exercise of power and interorganizational change. Such a process leads to a unification type of conflict resolution on the upper level of the continuum.

Once the decision to use a direct reaction, indirect reaction, or internal adjustment is made, a subsequent decision must be made as to the specific reaction that will be used; i.e., a direct reaction involving the refusal to participate in promotions sponsored by the manufacturer or to use an indirect reaction involving the refusal to accept any new product offerings from the manufacturer. Such a final decision will be a function of the past record of the manufacturer with respect to customer service failures and the past



record of reactions taken by the buyer in reaction to the level of service offered by the manufacturer.

Once the specific reaction has been taken, the effectiveness of the reaction must be evaluated by the buyer. Evaluation will occur during the next buying situations in which the buyer requests product from the manufacturer. Such a process will also result in feedback to update the record of service offered by the manufacturer and the record of reactions taken by the buyer in response to the manufacturer's perceived level of customer service.

#### Recommendations for Future Research

The recommendations for future research which would be fruitful:

1. Testing the ability of several factors such as prior service history, product volume, and product uniqueness for their ability to explain the variance in reactions exhibited to service failures.
2. The costs in dollars associated with each of the service failures identified.
3. An application of the model to another type of product and its distribution channel to determine the validity of the model in different settings.
4. A testing of the affect of the differences in internal record keeping systems on the reactions exhibited to service failures.
5. The integration of reactions as described on the wholesale level of a channel with the reactions as previously described on the retail level to form a more complete theory of reactions to customer service failures.



### Summary

In Chapter I, the contributions of this research to both marketing practice and theory were listed. An examination of the contributions is presented below as a summation to the research.

The primary contribution to both theorists and practitioners was listed as the determination of the consequences of a service failure as a first step toward a determination of the costs of a service failure. The potential reactions identified can clearly be seen in Figure 5-1, the short-run reactions, backorder or substitute, and the long-run reactions of either the direct, indirect, or internal types. These different levels and types of reactions to service failures are clearly defined by the research.

The second and third contributions for marketing theorists were listed as the investigation of situational effects and channel variables effect on the reaction decision. The situational effects can clearly be seen in Figure 5-1. The four sets of inputs to the different decision levels are the relevant situational variables to the final determination of the reaction decision.

The affect of the channel variables is not as clearly seen as the situational variables. Research Question F deals with the affect of channel roles,





conflict, power, and communication on the reaction decision. The levels of channel power are clearly seen as major determinants of the types of reactions exhibited. Of particular interest is the role of countervailing power as described in Appendix C.

To the marketing practitioner, the further contributions were listed as the investigation of the possibility of using customer service as a differential advantage and the identification of probable reactions to customer service failures. In the recommendations to manufacturers, one suggestion was that the manufacturer maintain its own record of customer service. If that service was of a sufficient level, it could be used as a very significant differential advantage. Lastly, the ability of the manufacturer to determine the probable reactions that will be exhibited by customers is examined in detail in the first recommendations to manufacturers.

## APPENDIX A

### ROBICHEAUX AND EL-ANSARY'S MODEL OF CHANNEL MEMBER BEHAVIOR



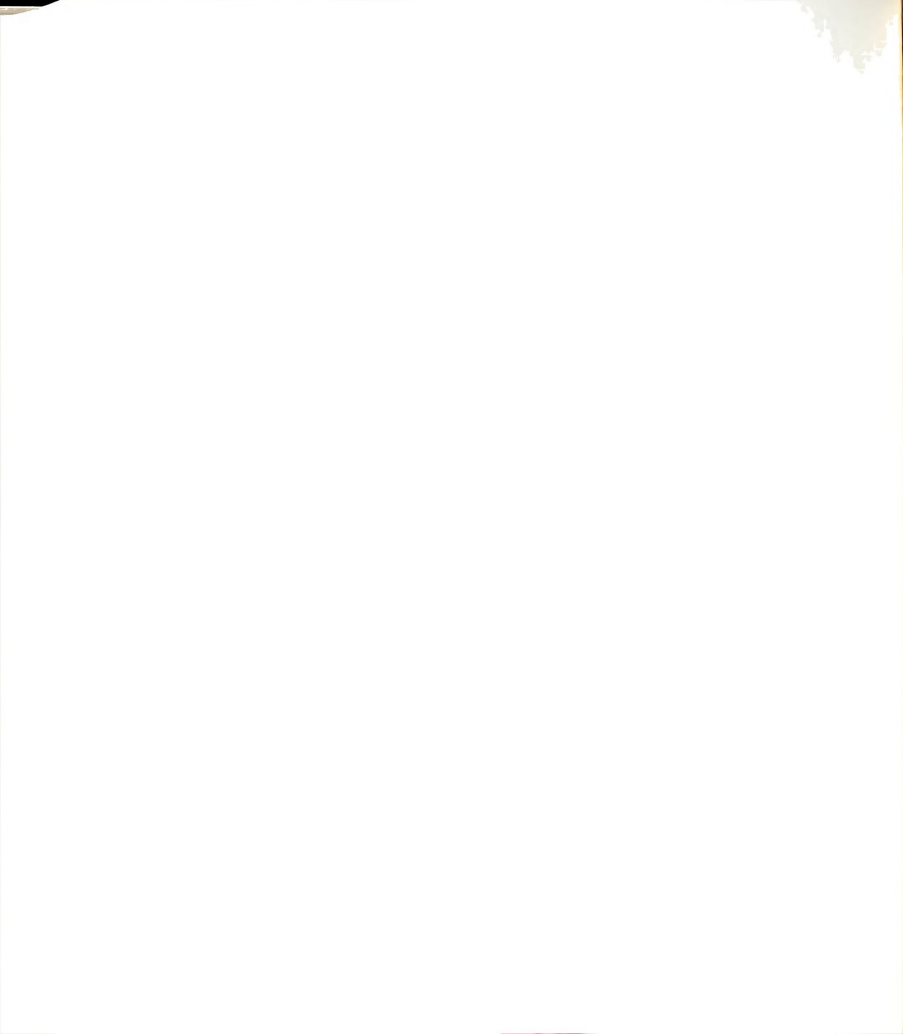
## APPENDIX A

### ROBICHEAUX AND EL-ANSARY'S MODEL OF CHANNEL MEMBER BEHAVIOR

Channel performance constitutes the focal point of the model. According to Robicheaux and El-Ansary, channel member behavior and channel structure determine performance, although structural variables are not treated in the model. In the model, therefore, channel performance depends on the effectiveness of control exercised and satisfaction or dissatisfaction of channel members with the channel relationship.

Channel control depends on factors such as channel member's power base and resources, dependence, tolerance for control, and leadership effectiveness. Channel member satisfaction or dissatisfaction depends on organizational performance. Poor performance will result in dissatisfaction, whereas good performance may bring about even better performance.

The model is comprised of five sets of variables. Relationships among them are stated in twenty-eight accompanying propositions that are discussed by Robicheaux and El-Ansary. The sets of variables are introduced below:



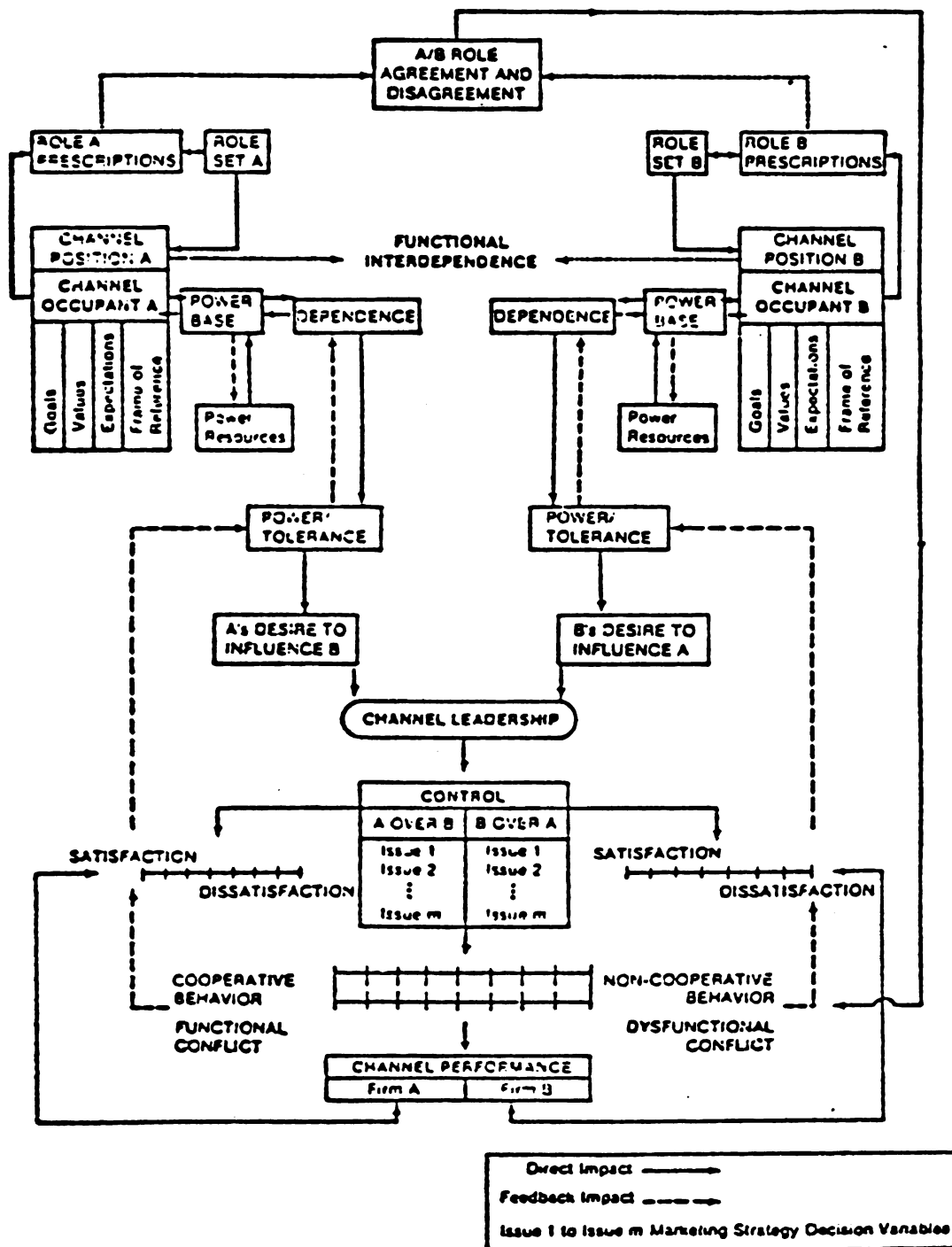


Figure A-1. Robicheaux and El-Ansary's Model of Channel Member Behavior.

Source: Robert A. Robicheaux and Adel I. El-Ansary, "A General Model for Understanding Channel Member Behavior," *Journal of Retailing*, Winter 1975-1976, pp. 13-30ff.

Position-role variables. Basically, each channel member considers its goals, expectations, values, and frame of reference and then selects a particular position in a channel. Associated with each channel position is a set of role prescriptions or tasks.

Power-leadership-control variables. The power of each channel member lies in its ability to influence the decision variables of other members of the channel. This ability is, in turn, determined by the bases of power which are partly a result of the channel member's position. Channel control is then achieved through a number of factors including power bases and leadership effectiveness.

Conflict-cooperation variables. Both forms of behavior are inherent in channels. Cooperation is needed because of task interdependency. Channel conflict, however, exists when members disagree on an issue. Three conditions basically create channel conflict: role incongruity, perceptual differences, and domain dissensus. A certain amount of cooperation, however, is required to achieve channel goals.

Performance-satisfaction/dissatisfaction variables. The relationship between these variables is circular: Good performance leads to satisfaction which, in turn, often stimulates even better performance. Effective and efficient channel performance is achieved through coordination of





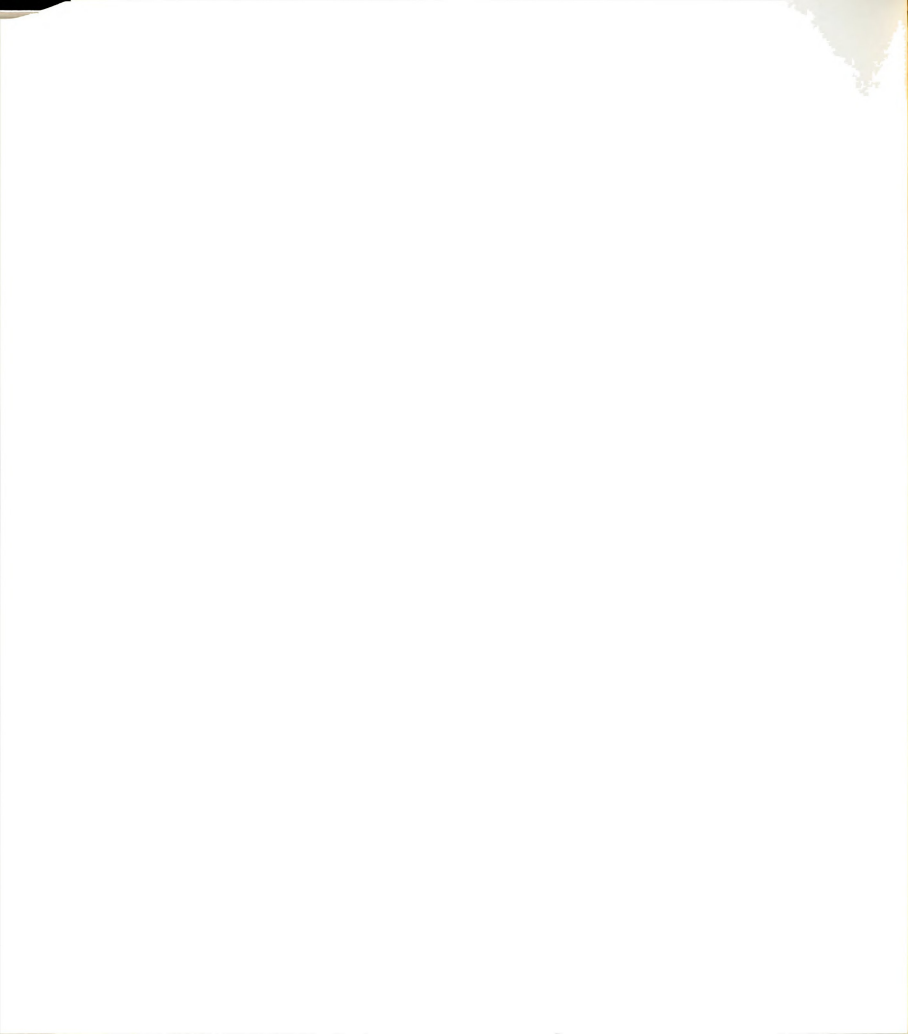
specific tasks among members and by ensuring acceptable levels of channel member satisfaction. The satisfaction of each member is directly related to its level of autonomy and inversely related to other members' control over that specific member in terms of marketing decision variables.

Communication-bargaining variables. Both communication and bargaining are present in all channel relations. These activities are inherent in channels, but not physically shown in the model, since, according to Robicheaux and El-Ansary, they permeate all channel relations.



## APPENDIX B

### THE INTERVIEW GUIDE



## APPENDIX B

### THE INTERVIEW GUIDE

#### I. Magnitude of the Problem

##### A. Number of stockouts encountered in a normal month

1. National brands
2. Regional brands
3. Private labels

##### B. How many "short-ships" (incomplete orders) were encountered in a normal month?

1. At what magnitude does a "short-ship" become a problem?
  - a. Record keeping
  - b. Promotional policies
  - c. Backorders from short ship
2. What is the average magnitude of a "short-ship"?
  - a. National brands
  - b. Regional brands
  - c. Private label products

##### C. What is the average order cycle time for your supplies?

1. How do you take order cycle time into consideration when establishing safety stocks?
2. To what extent does variation in order cycle time become a problem?
  - a. National brands



- b. Regional brands
    - c. Private labels
  - D. Aside from the three types of customer service failures discussed are there any other types that are equally important to you or your company?
- II. How do you react to customer service failures?
  - A. What are the short-run reactions that you can take to a customer service failure?
    - 1. Backorder
    - 2. Substitute
      - a. Different sizes of the same product
      - b. Different products
        - 1) Same size, price, and quality
        - 2) A different size, price, or quality
    - 3. Change vendors
    - 4. Other?
  - B. In the longer-run what options are available to your company to react to the overall service policy of a supplier?
    - 1. Direct reactions
      - a. We list the supplier's product
      - b. Cut shelf space for the product
      - c. Assign different shelf space
    - 2. Indirect reactions
      - a. Refuse to participate in any promotional activities sponsored by the supplier
      - b. Refuse to adopt any new products introduced by the supplier
      - c. Other

### 3. Internal reactions

- a. Carry more inventory
- b. Try to improve communications with suppliers
- c. Readjust ordering policies
  - 1) Change order point (frequency)
  - 2) Adjust order amount

## III. Procedures within the Organization

- A. How often are reports of service failures made
  - 1. Time period
    - a. Weekly?
    - b. Monthly?
    - c. Daily?
  - 2. Who makes the report and who receives it?
  - 3. Is this a continuous record kept to monitor supplier service performance?
  - 4. Are there any other types of reports kept on service performance of suppliers.
- B. Once a service failure occurs, what type of approval must be obtained before you can react?
  - 1. Is this the case for all reactions, both long- and short-run?
  - 2. Who gives this approval?
  - 3. What other managers or sources are consulted before you react?
- C. Is there a formal or informal policy on reaction to service failures.
  - 1. Matching products and reactions
  - 2. Seasonal concerns





D. How would your answers to the above areas be altered by the consideration of:

1. Product attributes

- a. Volume
- b. Gross margin
- c. Brand loyalty
- d. Degree of differentiation (avoidable number of good substitutes)

2. Supplier attributes

- a. Promotional support
- b. Level of consumer advertising
- c. Financial support
- d. Strength of brand name
- e. Previous record of customer service
  - 1) Number of previous service failures
  - 2) Severity of previous service failures
  - 3) Time since most recent service failure
  - 4) Supplier reputation
  - 5) Management of previous promotion
- f. Width of the supplier's product line
  - 1) Strength of the other products in the line competitively
  - 2) Degree of importance the supplier attaches to the other items in his product line



3. Competitive pressures

- a. Do you feel consumers will switch outlets because of out-of-stocks?
  - 1) Store loyalty
  - 2) Brand loyalty
- b. Are there any conditions in the competitive arena which would cause you to carry more inventory?
- c. Do you perceive yourself to be in a position to dictate to your suppliers what levels of customer service they must provide?



## APPENDIX C

### THE ROLE OF COUNTERVAILING POWER IN THE CHANNEL OF DISTRIBUTION



## APPENDIX C

### THE ROLE OF COUNTERVAILING POWER IN THE CHANNEL OF DISTRIBUTION

According to Emerson, the power in a distribution channel is a function of dependence (28:34):

The dependence of Actor P over Actor O is  
(1) directly proportional to P's motivational investment in goals mediated by O, and (2) inversely proportional to the availability of those goals to P outside the O-P relation.

The ability to mediate goals in which the other channel members have a motivational investment is a function of the sources of power available to a channel participant. These sources of power are reward, legitimate, referent, expert, and coercive (33:54). The coercive source can be differentiated from the other sources because it alone is a negative force which uses punishment to enforce one channel member's dominance over another. This is opposed to the other four sources which persuade a channel member to willingly follow the policies of some other channel member (56:383).

If a channel of distribution is viewed as a social system, the members can be viewed as being caught up in an intricate system of interdependency. Each member of the





Each member of the channel is motivated by the desire to accomplish his own goals and has joined the channel in order to better serve his own customers and thereby increase his own return. However, no channel member can pursue his own goals without the knowledge of how his actions will impact upon other members of the channel. In any social system, when a component perceives the behavior of another component to be impeding the attainment of its own goals or the effective performance of its role in the system, an atmosphere of frustration prevails. A state of conflict may be said to exist when any two components of any system of action become objects of each other's frustration.

Conflict within the channel is viewed as a process of changes in the task environment. These can be changes within the individual firm or between elements of the environment and channel member. These changes will induce realignments in the relationships between channel system members (17:20). This conflict will continue until it is resolved or until the channel ceases to function as a system. Conflict is, therefore, a process of two classes of change: (1) a change that precipitates the conflict relationship, or (2) a change in response to conflict which either leads to resolution or to the system's elimination (82:157).



Usually, the first reaction to frustration (conflict) is an attempt to remove its cause. In a distribution channel, an effort by one member to change the behavior of another channel member is an exercise of power (82:160). This can be either a use of coercive power or one of the non-coercive sources of power.

However, if a channel member cannot, or chooses not, to change the behavior of a frustrating channel member, it may choose to alter its own behavior in some way so that it can adapt and continue to compatibly remain in the channel system along with the other channel member whose behavior was so frustrating. This reaction is most often that of an inferior member of an asymmetrical power relationships. This, however, is not the extent of the behavior options available to an inferior member of a power relationship in reaction to conflict.

#### Countervailing Power

The concept of countervailing power as developed by Galbraith illustrates a further set of behavior options open to an inferior member of a power relationship. Galbraith hypothesized that concentration of power by one channel member usually induced the other channel members to attempt to react in such a way as to reduce that power (37). Emerson listed four ways in which inferior members of an asymmetrical power relationship may react to reduce the power of the dominant member (28:39):



1. Actor P may reduce the motivational investment in goals mediated by the controlling member of the power relationship.
2. Actor P may cultivate alternative sources of gratification of the goals mediated by the controlling channel member.
3. Actor P may attempt to increase the motivational investment of the controlling channel member in goals mediated by Actor P.
4. Actor P may deny to the controlling channel member alternative sources for achieving goals mediated by Actor P.

Thus, we may view the distribution channel as an intricate system of interdependent relationships involved in producing some output. Each member of the channel pursues his own goals which are better realized within a cooperative system in which the channel member is dependent upon the cooperation and services or outputs of the other channel members. Whenever there are changes in the task environment of the system this will call upon the members of the channel to adapt and change some portion of their normal activities.

These changes will produce conflict if the change in behavior on the part of one channel member frustrates another channel member in the realization of his goals. The aggrieved member will seek to remove the source of his frustration through an exercise of power. If the frustrated channel members' sources of power are insufficient to alter the behavior of the channel member which is the source of

the frustration the aggrieved member will either alter its own behavior in some way so as to make the frustration bearable, or the aggrieved member may adopt one of the reactions as listed by Emerson, in an attempt to reduce the power disparity.

#### Use of Countervailing Power

In the past decade due to the increased costs of operating a distribution system, especially the costs of carrying inventory, there has been an intense struggle to force inventory onto other members of the channel at other levels in an attempt to avoid the costs of carrying inventory (16:9). In addition, there has been an attempt to reduce service to channel members lower in the channel and force them to adapt to these cuts in service via internal adjustment of order policies, inventory levels, and maintenance of safety stocks. The struggle has been the result of the tumultuous economic environment of the 1970s. This economic environment represents a change in the task environment of the channel. The resulting efforts of some channel members to adapt to this change in the task environment has obviously caused frustration for other channel members and resulted in conflict within the channels.

A manufacturer, in an effort to reduce costs, may attempt to force inventory onto the wholesale and retail





organizations which comprise his set of customers. The manufacturer may do this by raising the minimum order size which will be accepted or by reducing the level of distribution service which he will be offered. If the product that this manufacturer produces is well differentiated and has a high level of consumer demand, it would seem to be reasonable to expect that the manufacturer would be successful given that he is not selling to a small set of buyers which could constitute an oligopsony.

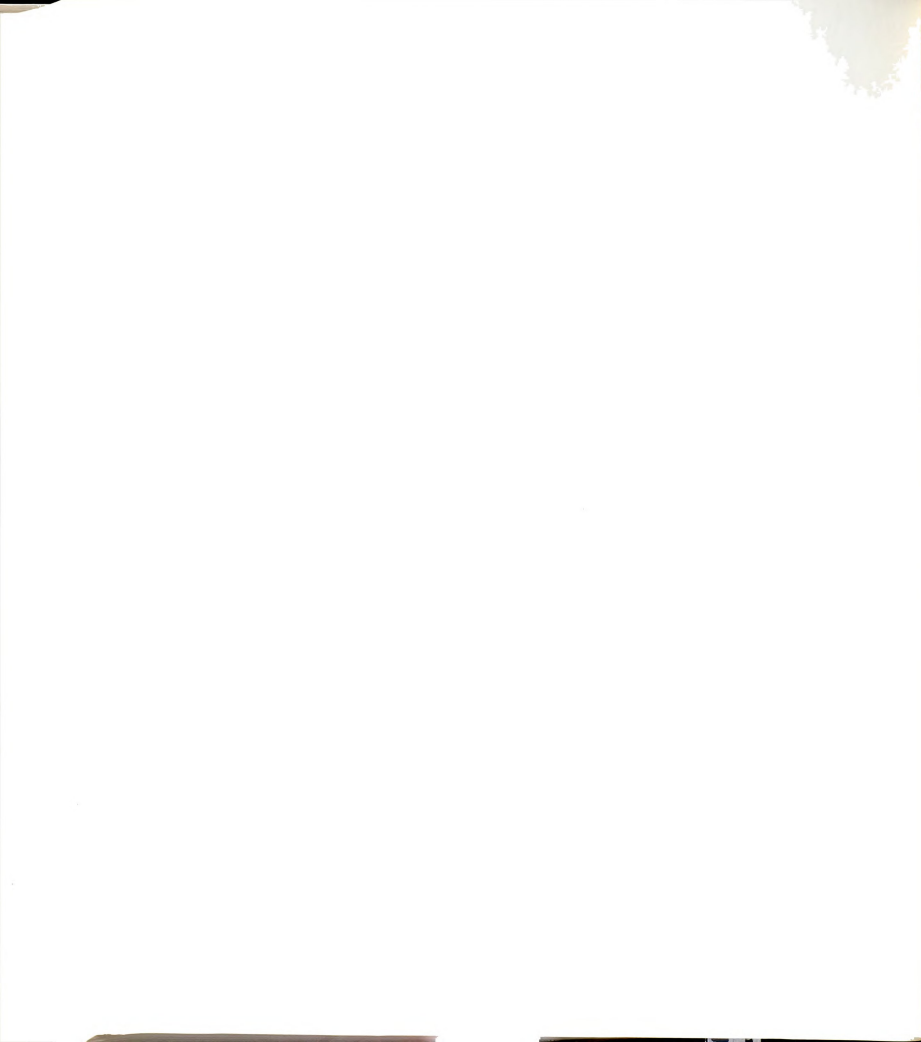
Competitive pressures would force the buyers of a well-differentiated product to agree to the manufacturer's marketing conditions in order to satisfy their own customers. If the manufacturer were to reduce its level of distribution service, the customers would be faced with the choice of altering their own policies and increasing the inventory levels they maintain or allowing out-of-stock situations with the resulting costs of loss of customer goodwill. However, this situation could be altered by the composition of the manufacturer's product line.

If the remainder of the manufacturer's product line represents a significant proportion of the sales and profits of the manufacturing organization, the manufacturer could be said to have a large motivational investment in the success of these products. As proposed,



one method of reducing the power imbalance created by the manufacturer's possession of a large power source in the form of a well-differentiated product, would be to increase the motivational investment in goals mediated by the inferior channel member and then for the inferior channel member to withhold the resources necessary for the superior channel member to achieve these goals.

Unless the remainder of the manufacturer's product line is also well differentiated with a strong consumer demand, it will require the aid of the intermediaries in the marketing channel to be successful. One key element of this aid will be the agreement of the intermediaries to participate in the distribution of these relatively undifferentiated products. Legislation has removed the ability of the manufacturer to use reward power to convince the intermediaries to carry not only the well-differentiated product but also the remainder of the product line offered; legislation has also eliminated the ability of the manufacturer to use coercive power to punish the intermediaries if they do not participate in the distribution of the remainder of his product line by withholding the well-differentiated product from the non-participating channel members. By withholding shelf-space or other forms of aid to the manufacturer's products, the intermediaries will be preventing the manufacturer from realizing his goals. Thus,



through the use of countervailing power sources, and through the elimination of some sources of power to the manufacturer through legislation, the disparity of power between the manufacturer and the intermediaries in the distribution channel may be narrowed or even reversed.

Thus, the power of the manufacturer who possesses a well-differentiated product will also be a function of the size of the remainder of the manufacturer's product line, the degree to which the remainder of the product line is differentiated, or the degree to which the remainder of the product lines is substitutable with competing products, the size and power of the intermediaries in the distribution channel, and the degree of motivational investment that the manufacturer has in the success of the remainder of the product line. The power of a manufacturer could be depicted as:

$$P_m = f[D_p \cdot C_d \cdot P_L^{-1} \cdot S_{pl}^{-1} \cdot V_c^{-1}]$$

where:

$P_m$  = the power of the manufacturer;

$D_p$  = the degree to which the product is differentiated from competing manufacturer's product offering;

$C_d$  = the degree of consumer demand for this differentiated product;

$P_L$  = the size of the remainder of the manufacturer's product line and the importance of these products to the manufacturer;



$S_{p1}$  = the substitutability of the remainder of the product line with the products of competing manufacturer's (could be said to be the inverse of the degree of differentiation for the remainder of the product line); and

$V_c$  = the volume and importance of the customer to the manufacturer.

The possession of a well-differentiated product with a strong consumer demand will expand the domain of the manufacturer's power. As Stern noted, the domain of power of a manufacturer with a highly differentiated product may be pervasive throughout the entire distribution channel (82: 160). However, domain which implies the range of channel members over which another channel member exercises power is a far different concept from that of the scope of a channel member's power.

The scope of a channel member's power refers to the areas in which a superior member of a power relationship may exercise his power and the types of results which that exercise of power will yield. While the domain of a possessor of a well-differentiated product might be quite large, the scope of this power might be quite limited. Depending upon the width of the manufacturer's product line and the degree of motivational investment on the part of the manufacturer in the remainder of the produce line aside from the well-differentiated product(s), the intermediaries in the distribution channel may be able to act to limit the scope of the manufacturer's power.





As the remainder of the manufacturer's product line becomes more substitutable, i.e., a commodity, the ability of the intermediaries to offset the power the manufacturer derives from the possession of a well-differentiated product increases. Through the ability to mediate the success of the remainder of a manufacturer's product the intermediaries in a channel of distribution may be able to limit the scope of the manufacturer's power.



APPENDIX D

SELECTED DIALOGUES FROM INTERVIEWS  
WITH GROCERY EXECUTIVES



## APPENDIX D

### SELECTED DIALOGUES FROM INTERVIEWS WITH GROCERY EXECUTIVES

In the following abstractions the questions asked by the interviewer are typed in italics with the responses from the grocery executives in regular type.

#### From an Interview with a Buyer at Company F

*Are you measured on the level of service you offer to the retail stores?*

Yes, currently we are trying to give 93% service to our stores. This translates into about 97% on the store shelf.

*Is there any other basis for buyer evaluation?*

Profits, on the area we are responsible for.

*Are stockouts the most serious type of service failure you encounter?*

A stockout can be the most serious failure. The results can really get out of hand, but, in the long run, you usually get a lot more notice of a stockout than say a "short-ship."

*Do you backorder?*

No, if an order, or part of an order, cannot be filled, we tell the manufacturer to forget it. If we didn't we'd have partial shipments and broken orders all over the place. Our warehousing people would probably quit.

*Are "short-ships" as bad as stockouts?*



They usually aren't as severe as a stockout but they hurt in other ways.

*Such as?*

Usually a "short-ship" doesn't give you any warning. The first you are aware of a problem is when a shipment shows up short. If there is a long lead time on the product and you are short say 30 to 40% on the order, you know then that you are going to be out-of-stock on the store shelf.

A large part of our problem on "short-ships" is because of the lousy service we receive from the carriers.

*Is order cycle time usually a problem because of the carriers?*

Yes, most of our suppliers are pretty good about getting out the orders, but the carriers are terrible.

*What type of delivery times do you face?*

We allow 10 days minimum for a rail car delivery. I've seen it take as long as 21 days to get a rail shipment from [Company X] and that is only about 250 miles from here. Truck is better, we allow 4 days for delivery by truck, but they are getting worse, it often takes them as long as 10 days now.

*How often do you encounter these different types of service failures?*

What do you mean?

*How often does a stockout occur?*

Stockouts aren't too bad right now; you usually get complete stockouts as a result of product allocations. Right now most of our suppliers are doing pretty well. You tend to see stockouts in the winter or in years when there is a bad harvest.

*What about "short-ships"?*

Usually they are as frequent as stockouts, but for some reason we are seeing a lot more of them now. I think some of our suppliers are cutting their inventories. A couple of them are a real problem.





*Order cycle times?*

Like I said, because of the damned railroads it's almost completely random. We have problems with late delivery every day. I can see now why [Brand X] soups went completely to truck deliveries. It sure makes our life easier even if the soup is a couple of cents more.

*Are there any other customer service problems you see as important? Your boss mentioned one company at lunch.*

Oh yes, [Brand Z] changed pack on us with only about a week's notice. Our entire system was set up to take a 32 pack and with a week's notice, they went to a 28 pack.

*Do you include things like this in your evaluation of a supplier?*

Sure, I imagine that everybody in the industry is upset. It takes us about 4 weeks to change over; this is causing us a lot of headaches.

*Why did they do it?*

I would say that they are trying to get all of the old 32 packs out of the systems. If they announced the change-over way in advance, people would change over and start ordering 28's as soon as they were done with the change-over. If that happens, Z gets stuck with a lot of 32 packs that no one will take unless they are repackaged. But this way it is still going to cost them more.

*How is that?*

They have a new product out (Product Z) that they want on the shelf. I know I'm not going to put it on the shelf. I've got enough (Product Z) headaches right now, and I don't need any more headaches from them. I think a lot of other people feel that way too.

*When you are trying to force a supplier to improve his service, do you often take action against new product offerings?*

Well, you won't do any favors for anybody giving you problems. If the product is really good, you have to take it. But, if the product is in-between, you can find others to take its place. Even if you take a product, you don't have to take all the flavors or sizes.



Responses from a Merchandising  
Executive at Grocery Company A

*When one of your buyers encounters a service failure, what options are open to him?*

The first thing he should do is call and find out what happened. Sometimes even the broker or local representative doesn't know why the stockout occurred. Then you have problems.

*Is there anything else the buyer can do?*

We backorder sometimes--that is about all you can do. We only backorder promotion items.

*Can you substitute?*

The buyer can substitute if he is given enough advanced warning and the supplier has another product or another size of the product that is acceptable.

*Does this happen often?*

Not as often as we would like it to. The problem is that we don't get enough advanced warning of a problem to substitute.

*In the long run, is there any other action that a buyer can take to force a manufacturer to provide better service?*

Sure, if the buyer feels the manufacturer just isn't trying to provide good service we can discontinue the product. If the manufacturer is really bad, we might just discontinue all of our business with him.

*Do you do this often?*

No, you've got to remember that when you cut out an item, or a manufacturer, you are also hurting yourself. We don't like to discontinue a product, but if we are found with really poor service, we will. If the manufacturer's service is poor, it means that you are going to stockout on the store shelf. That means dissatisfied customers. I'd rather not carry the product than lose customer goodwill because of poor manufacturer service.

*Is discontinuance the first action a buyer would take?*

No, there are a series of things a buyer could do before he discontinued a product. The first thing might be some kind



of a verbal warning. After that a buyer might change the shelf location of the product. If that didn't work, you might cut the manufacturer's promotions or refuse to accept new product offerings. The last thing a buyer might do is discontinue the product.

*Is cutting out a manufacturer's promotions a serious step? Do you have any examples?*

Sure, take [Company S], their [Product Y] has 85% of the [seasonal] market. Last year because they refused to set up alternative plans we had a real problem. All that snow in [their city] caused a real rail tie-up. They didn't have any alternative truck program set up. We were out of stock on the store shelf for over a week one time.

This year we have already decided that from December 1st to March 1st there will be no [Company S] promotions. If we have any more stockouts I sure don't want to call customer attention to them by stocking them.

Given [Company S's] service record, I don't know if we would pick up any new products they brought out right now. It [the produce] would have to be pretty good for us to take a chance on any more of [Company S's] products.

*What if the product were a strong one, a product with a strong consumer demand? What would you do then?*

Pretty much the same things except we would probably use some other products in the manufacturer's line.

*Are there any types of internal adjustments you would make as a result of a manufacturer's poor service?*

What do you mean?

*Carry more inventory, for instance?*

No. We aren't going to let a manufacturer get away with poor service. We will try to cooperate with our suppliers, but we aren't going to lower our inventory turns or anything.

*Then you would force a manufacturer to improve his service?*

Yes, we used to have a lot of trouble with LTL (less-than-truckload) suppliers. The motor carrier service on LTL orders is terrible. Finally we went to our LTL suppliers and told them that if they wanted to stay in business with us they would have to establish inventories in [City] or in [City].



*Why?*

There are major public warehouses in both those cities, where a lot of our other companies maintain inventories. Usually an order from one of the LTL suppliers can be consolidated with shipments from our other suppliers. We get a lot better service that way.

*I see where you don't list cutting shelf space as a type of action a buyer can take. Why is that?*

We are basically a case stocker. We establish the minimum shelf space for a product as one and one-half cases. When the inventory gets to one-half a case we reorder. Rather than cut below one and one-half cases we would rather discontinue the product.

*What about products with more than one and one-half cases of shelf space?*

When you start cutting shelf space it is just a slow death. Instead of going through the process where you cut shelf space and sales decline so you cut shelf space more and sales decline more, we would rather just go ahead and delist the product.

From an Interview with a Buyer  
at Company D

*How often are reports of service failures made to you?*

We receive daily reports on overdue shipments, shipments that are due on that day, and products that are in short supply at the warehouse. We also maintain a continuous report on the level of service our suppliers are offering.

*Once a service failure is encountered, what type of approval must be obtained before you can react?*

We are pretty free to do what we think is best. The only [constraint] is that we keep [the head buyer] informed of our decision.

*Is this the case for all reactions?*

For the most part. If I were to decide to delist [a very important product], I would probably okay it with [the head buyer].





*Is there any type of formal or informal policy on the reactions to service failures?*

Our only policy is communication, if you call that a policy. When one of our suppliers has problems we are expected to find out why before taking any actions. If the manufacturer has had some service failures that were beyond its control there is no point in us taking some action against it.

We are expected as a matter of course to keep in close contact with our suppliers. If one of our suppliers is going to have trouble we can prepare for it. If [a manufacturer] is going to run short of [an ingredient] and have to go on allocation we will learn of it in advance, and maybe we can build up our inventories to carry us through the allocation period. . . .

. . . We also expect our suppliers to provide us with a ship date. We do this so we can separate the part of the order cycle the manufacturer controls from the part the [carrier] controls. If we have problems with order cycle I want to know who is at fault before I take action.

*How important is the order cycle?*

We consider the delivery date as a contract. If a manufacturer continues to give us a delivery date and then can't meet it, we will get rid of him.

*What if the carrier is the problem?*

In that case we will ask the manufacturer to change carriers. If the manufacturer refuses we will consider the problem the manufacturer's.

*When you are considering a reaction, what is the affect of volume?*

Volume is important, but you have got to look at the number of inventory turns you are getting on the product and the gross margin of the product.

*What about brand loyalty?*

Where there is a strong brand loyalty you have to consider it. We have seen a decline in brand loyalty over the past few years. It seems like the [consumers] are becoming more price sensitive. We have seen a lot more brand switching, due to promotions and price deals than we used to.



*Then is promotional support becoming more important?*

It won't get a product on the shelf, but for those products we already carry it is a [factor]. One of the things we watch on our products is the promotional velocity they have. We use this in preparing our advertisements.

*Is consumer advertising by the manufacturer important?*

Sure, it builds brand loyalty.

*If a manufacturer does a high level of consumer advertising, are you more reluctant to take action against those products?*

Yes, in general I would say so.

*How important is the manufacturer's previous service history?*

Very important. We watch the level of service our suppliers give very closely. Like I said, we maintain a continuous record of supplier service. If a supplier's service drops we will talk to him. If the level of service doesn't improve we will take action against him.

*What do you measure?*

We look at the number of previous service failures.

*In what manner?*

We look at the number of lines not filled or only partially filled. That is our primary concern. We also record the number of late shipments.

*How important is the manufacturer's reputation for good service or bad service?*

It is only important if we have not had any previous dealings with the company.

*Are there any other measures of service you look at?*

We look at how the manufacturer manages his promotions. We like to have six to eight weeks of advanced warning on promotions. If we decide to feature the promotion, we expect to have the last of the promotional inventory in the warehouse two weeks before the promotion starts.



*Do you feel that customers will switch locations because of out-of-stocks?*

In some cases. It depends upon the product being stocked out. There are maybe a couple hundred products that we carry that might cause customers to change locations. Store loyalty is important. We try to maintain a high image of our store and our prices. I guess it is a trade-off of brand loyalty versus store loyalty.

*Are there any conditions in which you will carry more inventory?*

Not if we are forced to. One stockout won't hurt us; that happens from time to time. If a manufacturer knows there is going to be a problem and a product is going to go on allocation, and the manufacturer comes to us as a favor we might carry some additional inventory.

*Do you perceive yourself to be in a position to dictate to your suppliers what levels of customer service they must provide?*

To the extent they want to do business with us, yes.



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